To The principal PDEA's College of Engineering

Manjari(Bk.)

Subject:- "Entrepreneurial decision-making."

As per above reference subject I am Prof.shirsath S S from mechanical Engineering department going to organize one day Seminar on "Entrepreneurial decision-making." for our college students on 10th of Feb 2023 at 11:00 am .

So I requested to please give the permission for this program,

Content of Seminar is given below

The key objective of this program is to Entrepreneurship and entrepreneurial cultures are receiving an increased amount of attention in both academic research and practice. The different fields of study have focused on the analysis of the characteristics of potential entrepreneurs and the firm-creation process.

Thanking You

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Notice

All the student of mechanical engineering department here by informed that department is going to organize Seminar on "entrepreneurial decision-making." for our college students on 10th of Feb 2023 at 11:00 am. So all students from SE, TE BE attain above program.

Content of Seminar is given below

The key objective of this program is to Entrepreneurship and entrepreneurial cultures are receiving an increased amount of attention in both academic research and practice. The different fields of study have focused on the analysis of the characteristics of potential entrepreneurs and the firm-creation process.

Co-coordinator

ffÓD †Mechanical

Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307

Pune District Education Association's COLLEGE OF ENGINEERING Manjari (Bk), Tal.- Haveli, Dist.-Pune.412307 (Maharashtra) (Approved by A.I.C.T.E New Delhi, Affiliated to Savitribai Phule Pune University, Pune) DEPARTMENT OF MECHANICAL ENGINEERING

Ref. No. : COEM/MECH/2023 /

Date :- 07 Feb 2023

To, Dr. Dadashri Kamathe, Padmavati Industries Pune

Subject: - Invitation as a Guest for Seminar.

Sir,

We are very proud to invite you as a Guest for Seminar for our students at P.D.E.A College of Engineering Manjari. Your profound knowledge in the field of Engineering and your motivational approach will help participants to understand challenges as Entrepreneurial in professional &Technological environment.

The key objective of this program is to provide a deeper understanding of the decision-making processes of entrepreneurs

Date: 10th of Feb 2023 Time- 11.00 AM Venue: College of Engineering Manjari, Pune- 412307)

Thánking You, Dr. S. A. Patil ⊁HOD Mechanical Engineering

Pune District Education Association's College of Engineering Manjari (Bk.)

Pune District Education Association's

COLLEGE OF ENGINEERING

(Approved by A.I.C.T.E New Delhi, Affiliated Savitribai Phule Pune University, Pune)

DEPARTMENT OF MECHANICAL ENGINEERING

Manjari (Bk), Tal.- Haveli, Dist.-Pune.412307 (Maharashtra)

Ref. No.: COEM/MECH/2023 /

Date: 10th of Feb 2023

To, Dr. Dadashri Kamathe, Padmavati Industries Pune

Subject: - Thanks letter

Sir,

We are very much thankful to you for accepting our invitation for delivering Guest for Seminar on 10^{th} of Feb 2023 . We hope that you will find the experience personally rewarding for agreeing to attend in this wonderful opportunity to recognize talented, hardworking young people.

Your Directions are worth for our students in respective area.

Thanking You, Date: 10th of Feb 2023

Yours sincerely,

Prof Shirsath S S

Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307

PDEA's College of Engineering Department of Mechanical Engineering SEMINAR ON Entrepreneurial decision-making ACTIVITY REPORT

One day PDEA's College of Engineering seminar on "Entrepreneurial decision-making." organised by Department of Mechanical Engineering PDEA's College Maniari (Bk) Pune.	
Mechanical Seminar Hall	
10 th of Feb 2023, 11.00 am	
Mr.Dadashri Kamathe ,Padmavati Industries	

Objective:

- knowledge about various laws that protect owners of "Entrepreneurial decisionmaking.".
- Mostly in the form of Entrepreneurial.

Time	Particulars
10.45 am to 11.00am	Welcome and Introduction of resource person By Department of faculty Prof. S A Patil
11.02 am to 12.15 am	Introduction "Entrepreneurial decision-making."
12.15 am to 12.30 pm	Question & answer session
12.30 pm	Vote of thanks

Description of the activity:

- The seminar began on a formal note by lighting of lamp in online mode followed by introduction of resource persons from Staff of Department of Mechanical
 - Engineering
- Mr.Dadashri Kamathe delivered lecture on Introduction Entrepreneurial decision-making
- The seminar presentation was followed by an interactive session
- Feedback was obtained from the participants/delegates.

Outcome of the activity:

- Highlighting salient aspects of Entrepreneurial decision-making
- Imparting awareness about Entrepreneurial decision-making .
- Activity experience:

a. Outcome wise description of observations/explanations:

Students and faculty appreciated the initiative and participated actively in the seminar.

b. The concept/principles/procedures learnt as the result of activity:

The faculty and students were made aware about Entrepreneurial decision-making

c. Application of observation/experience in professional life/work:

The faculty and students would benefit by aiming Entrepreneurial

d. Summary & conclusion:

Total: faculties and students participated actively in the seminar and gained an insight into the various aspects of Entrepreneurial decision-making

9. Assessment of the activity outcomes:

The overall activity has been well received by the faculty and students. Student count :-30

Faculty count :- 12



PDEA's

College of Engineering Manjari (Bk.)

Department of Mechanical Engineering

Name of Event: - Seminore " Entrepreneurial decision - makey, Date: - 10th feb 2023

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To

The principal

PDEA's College of Engineering

Manjari(Bk.)

Subject:- "Intellectual Property Rights"

As per above reference subject I am prof.shirsath S S from mechanical Engineering department going to organize one day Seminar on "Intellectual Property Rights" for mechanical engineering students on 22th of Nov 2022 at 11:00 am.

So I requested to please give the permission for this program,

content of the Our Session aims to cover the following points: (Duration -1 hr)

Content of Seminar is given below

The key objective of this program is to disseminate the importance of Design Mark and Patents Rights for faculty and researchers through case studies and discussion.

hanking You

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Pune District Education Association's COLLEGE OF ENGINEERING Manjari (Bk), Tal.- Haveli, Dist.-Pune.412307 (Maharashtra) (Approved by A.I.C.T.E New Delhi, Affiliated to Savitribai Phule Pune University, Pune) DEPARTMENT OF MECHANICAL ENGINEERING

Ref. No. : COEM/MECH/2022 / 18 th of Nov 2022

To, Dr. I. B. Idage, NCL,

Pune

Subject: - Invitation as a Guest for Webinar.

Sir,

We are very proud to invite you as a Guest for Seminar for our students at P.D.E.A College of Engineering Manjari. Your profound knowledge in the field of Engineering and your motivational approach will help participants to understand challenges in professional &technological environment.

The key objective of this program is to disseminate the importance of Design Mark and Patents Rights for faculty and researchers through case studies and discussion.

Date: 22 th of Nov 2022 Time- 11.00 AM Venue: College of Engineering Manjari, Pune- 412307)

Thanking You, Dr. S. A. Patil HOD Mechanical Engineering

Notice

All the student of mechanical engineering department here by informed that department is going to organize Seminar on "Intellectual Property Rights" for mechanical engineering department students on 22th of Nov 2022 at 11:00 am . So all students from SE, TE BE attain above program.

Content of Seminar is given below

The key objective of this program is to disseminate the importance of Design Mark and Patents Rights for faculty and researchers through case studies and discussion.

Co-coordinator

An

Mechanical

Pune District Education Association's

COLLEGE OF ENGINEERING

(Approved by A.I.C.T.E New Delhi, Affiliated Savitribai Phule Pune University, Pune)

DEPARTMENT OF MECHANICAL ENGINEERING

Manjari (Bk), Tal.- Haveli, Dist.-Pune.412307 (Maharashtra)

Ref. No.: COEM/MECH/2022 /

Date: 22th of Nov 2022

To,

Dr. I. B. Idage, NCL,

Pune

Subject: - Thanks letter

Sir,

We are very much thankful to you for accepting our invitation for delivering Guest for Seminar on 22^{th} of Nov 2022 . We hope that you will find the experience personally rewarding for agreeing to attend in this wonderful opportunity to recognize talented, hardworking young people.

Your Directions are worth for our students in respective area.

Thanking You,

Date: 22 th of Nov 2022

Yours sincerely, Prof Shirsath S S

PDEA's College of Engineering Department of Mechanical Engineering WORKSHOP ON Intellectual Property Rights ACTIVITY REPORT

Title of Activity	One day PDEA's College of Engineering workshop on " Intellectual
	Property Rights" organised by Department of Mechanical
	Engineering PDEA's College Manjari (Bk) Pune.in collaboration with CAD CAM Guru
Venue	Mechanical Seminar Hall
Date & Time	22 th of Nov 2022, 11.00 am
Resource person	I B Idage, NCL

Objective:

- knowledge about various laws that protect owners of IP.
- Mostly in the form of patents.
- copyrights, and trademarks. Schedule:

Time	Particulars	
10.45 am to 11.00am	Welcome and Introduction of resource person	
	By Department of faculty Prof. S A Patil	
11.02 am to 12.15 am	Introduction Intellectual Property Rights	
12.15 am to 12.30 pm	Question & answer session	
12.30 pm	Vote of thanks	

Description of the activity:

- The workshop began on a formal note by lighting of lamp in online mode followed by introduction of resource persons from Staff of Department of Mechanical Engineering
- I B Idage delivered lecture on Introduction Intellectual Property Rights
- The seminar presentation was followed by an interactive session
- · Feedback was obtained from the participants/delegates.

Outcome of the activity:

- Highlighting salient aspects of Intellectual Property Rights
- Imparting awareness about Intellectual Property Rights

Activity experience:

a. Outcome wise description of observations/explanations:

Students and faculty appreciated the initiative and participated actively in the workshop.

b. The concept/principles/procedures learnt as the result of activity:

The faculty and students were made aware about Intellectual Property Rights

c. Application of observation/experience in professional life/work:

The faculty and students would benefit by aiming Patent

d. Summary & conclusion:

Total: faculties and students participated actively in the workshop and gained an insight into the various aspects of Intellectual Property Rights

9. Assessment of the activity outcomes:

The overall activity has been well received by the faculty and students.

Student count :-32

Faculty count :- 12

Principal Pune District Education Association College of Engineering Manjari (Bk. Pune - 412307

PDEA's

College of Engineering Manjari (Bk.)

Department of Mechanical Engineering

Name of Event: - Jojellectual property Riguis Date: <u>22/11/2022</u>

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Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307.

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То

The principal

PDEA's College of Engineering

Manjari(Bk.)

Subject:- Hydrogen Fuel & Its Application for EVs

As per above reference subject I am prof.shirsath S S from mechanical Engineering department going to organize one day Seminar on Hydrogen Fuel & Its Application for EVs for mechanical engineering students with CAD/CAM guru institute on 27 th of Auguest 2022 at 11:00 am . CAD/CAM guru institute is very well known institute and we recently sign MOU with this institute for exchange the knowledge between student, faculty and this institute.

So I requested to please give the permission for this program,

content of the Our Session aims to cover the following points: (Duration -1 hr)

Technical topic:

- Why Hydrogen? Its advantages

- What is Green Hydrogen production
- Green Hydrogen Govt. Policy
- Uses of Hydrogen so far
- Using Hydrogen for transport sector
- Challenges: FCEV passenger cars versus battery EV cars
- FCEV, a promising option for heavy vehicles

Thanking You

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Pune District Education Association's

COLLEGE OF ENGINEERING

(Approved by A.I.C.T.E New Delhi, Affiliated Savitribai Phule Pune University, Pune)

DEPARTMENT OF MECHANICAL ENGINEERING

Manjari (Bk), Tal.- Haveli, Dist.-Pune.412307 (Maharashtra)

Ref. No.: COEM/MECH/2022/23

Date: 27 th Aug. 2022

To,

Mr. Anand Thakar

Subject: - Thanks letter

Sir,

We are very much thankful to you for accepting our invitation for delivering Guest for Seminar on 27 th Aug.2022. We hope that you will find the experience personally rewarding for agreeing to attend in this wonderful opportunity to recognize talented, hardworking young people.

Your Directions are worth for our students in respective area.

Thanking You,

Date: 27 th Aug.2022

Yours sincerel DY SAP

Date :-22 Aug 2022

Notice

All the student of mechanical engineering department here by informed that department is going to organize Seminar on Hydrogen Fuel & Its Application for EVs for mechanical engineering department students with CAD/CAM guru institute on 27 th of Auguest 2022 at 11:00 am. So all students from SE, TE BE attain above program.

Content of workshop is given below

Technical topic:

- Why Hydrogen? Its advantages
- What is Green Hydrogen production
- Green Hydrogen Govt. Policy
- Uses of Hydrogen so far
- Using Hydrogen for transport sector
- Challenges: FCEV passenger cars versus battery EV cars
- FCEV, a promising option for heavy vehicles

Co-coordinator

Mechanical



Proposal for Seminar

Sushant Mulay <sushant.mulay@cadcamguru.com> To: "mechcadlab123@gmail.com" <mechcadlab123@gmail.com>

Fri, Aug 12, 2022 at 11:17 AM

Kind Attention: Principal and HoD -Mechanical Sir,

Dear Sir,

Greetings from CADCAMGURU, Pune!

CADCAMGURU is a pioneer in CAD and CAE job oriented training with over 24 years of presence in the State.

With immense expertise in providing industry skills relating to Mechanical and Industrial Automation, CADCAMGURU also leads a lot of initiatives to provide job opportunities to its students.

In the last two years, despite the pandemic, CADCAMGURU has provided placement to more than 600 students in the core domain area of CAD /CAE applications. We are also committed to create awareness among all Engineering college students about the current industry opportunities and additional skills needed to match the industry expectations.

As discussed, we would like to propose a Seminar /Expert Guest lecture in your college for your Mechanical TE & BE students by our Industry Expert Mr. Anand Thakar who has more than 37 years of Industry Experience. (You may kindly refer to his brief profile attached with this e-mail.)

Topic : Hydrogen Fuel & Its Application for EVs

Our Session aims to cover the following points: (Duration -1 hr)

1. Technical topic:

- Why Hydrogen? Its advantages
- What is Green Hydrogen production
- Green Hydrogen Govt. Policy
- Uses of Hydrogen so far
- Using Hydrogen for transport sector
- Challenges: FCEV passenger cars versus battery EV cars

- FCEV, a promising option for heavy vehicles

2. Industry expectations from Mechanical design engineers:

- Additional Skill development ideas for TE, BE students

- Current industry expectations, types of job opportunities available

Looking forward to your Seminar day and time confirmation for proceeding t

Principal Pune District Education Association's College of Engineering Manjari (Bk.) Pune - 412307. Warm regards,

Team CADCAMGURU Seminars

Sent from Mail for Windows

-Sushant Mulay

Director,

Apex Infotech

CADCAMGURU, Hadapsar.

Phone - 9822722358.





Topic: Hydrogen Fuel & Its Application for EVs

Time: Aug 27, 2022 11:00 AM India

Join Zoom Meeting

https://zoom.us/j/95080299179?pwd=bjlKcEUrOXpPVFlsdC9iUTBiZFRFQT09

Meeting ID: 950 8029 9179

Passcode: 551577

Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307.

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Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307.

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Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307.

POST PROGRAMME REPORT (PPR) OF Entrepreneurship Awareness Program

1. Name & Address of Programme Implementing Agency (With Tel/ Fax /E-mail)	: Pune District Education Association's College of Engineering, Manjari (Bk), Pune -412307 020-26996275 (Reception), 020-26996625 Fax No. 020-26996275	
2. Programme Location	: PUNE DISTRICT EDUCATION ASSOCIATION'S College of Engineering, Manjari (Bk), Pune -412307	
3. Programme Date	: 19, 20 & 21 December 2022	
4. Name of the Coordinator	: Prof. Deshpande Ajit S.	
5. No. of candidate attended the programme: 80 (Male 62 Female 18) MBA Students		

- 6. List of participants : ANNEXURE I
- 7. Program schedule : ANNEXURE II
- 8. List of resource persons : ANNEXURE III
- 9. Participant's feedback : ANNEXURE IV

10. Photographs of Programme: Attach one group photo, one classroom photo and one industry/institute visit photo

Dentrande

Programme Coordinator

Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307.

ANNEXURE – I

ENTREPRENEURESHIP AWARENESS PROGRAM VENUE: PDEA's College of Engineering, Manjari (Bk), Pune. LIST OF PARTICEPENTS Date: 19/12/2022 to 21/12/2022

ANNEXURE – II

PROGRAMME SCHEDULE

Date and	Session*	Subject / Topic	Faculty
Day			
18/12/2022	Ι	Inauguration- Camp Objective, Why Entrepreneurship (general concepts)	Sunil Mirashi
	II	Historical background-Indian values vis-à-vis Entrepreneur ship and the present scenario	Sandeep Rasalpurkar
	III	Identification of Business opportunities and Mechanisms of product selection	Sunil Mirashi
	IV	Technology-assistance from R&D labs and other institutions on choice of technology etc	Anil Donawade
19/12/2022	Ι	How to start a SSI unit (General concept about the Govt. formalities, rules & regulation, location, and different aspect of an industrial venture)	Mr Abhijeet Dandwate
	II	Technical & commercial aspects of SSI unit (General concept only)	Mr Abhijeet Dandwate
	III	Financial aspects of SSI unit including salient features of a project report	Arun khemlani
	IV	Schemes of assistance and Support available from Govt. agencies, banks, financial institutions, SFCs etc	Arun khemlani
20/12/2022	I	Creativity and business- the man behind the venture -the behavioral scientist's approach	Sandeep Rasalpurkar
	II	Communication skills for better results in business	Sunil Mirashi
	III	Factory visit and experience sharing by existing entrepreneur	Sunil Mirashi

* = Each session is one hour fifteen minutes

Principal Pune District Education Association's College of Engineering Manjari (Bk.). Pune - 412307.

ANNEXURE – III

LIST OF FACULTY / RESOURCE PERSON

Sr. No.	Name and Address	Designation	Organisation
1.	Mr. VijayTupe	Bank Branch Manager	Janata Sahakari Bank Ltd, Pune
2.	Mr. Sandeep Rasalpurkar	Entrepreneur	Self Employed ,Speaker on Soft Skill Development& Entrepreneurship.
3.	Mr. Sunil Mirashi	Director	Divine Corporation, Training & consulting
4.	Mr. Rahul Shilpakar	Assistant Professor	Dhole Patil College Of Engineering, Pune.
5.	Mr. Sunil Patil	Practicing Lawyer	Senior Judge, Juvenile Justice Board, Pune District
6.	Mr Abhijeet Dandwate	principal	Dhole Patil College Of Engineering, Pune. Technical Aspects of Entrepreneurship
7.	Mr Pramod Dasturkar	Assistant Professor	K.J.COLLEGE OF ENGINEERING, Pune.
8.	Mr Arun Khemlani	Certified Financial Planner	Self Employed. Speaker on Financial aspects of Business Ideas and Bank Proposals, Basic Entrepreneurial Finance Education.
9.	Mr. Suresh Todkar	Professor	Ness Wadia College, Pune
10.	Mrs. Vidyulata Gawade	Visiting Faculty	Soft Skill Trainer
11.	Mr. Anil Donawade	Training & Placement Officer	AISSMS's Polytechnic, Pune
12.	Mr. Shahu Jadhav	Project Consultant	Self Employed

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Principal Pune District Education Association's College of Engineering Manjari (9k.), Pune - 412307.

ANNEXURE – IV

LIST OF INDUSTRY VISITED

Class Room Photos



Industry visit photograph







Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307.

FEED BACK ANALYSIS OF PARTICIPANT - SUMMARY

Programme Location: PDEA's College of Engineering, Manjari (Bk)

Date: 19, 20 & 21 December 2022 Total No. of Participants: 80 Nos.

 Q.1) From where you got the information about a) Pamphlets / Broacher b) News paper Advertisement c) Posters/ Hand Bills d) Other (Notice Board): 	out this programme? 00 Nos. (0.00 %) (0080) 00 Nos. (0.00 %) (00/80) 00 Nos. (0.00 %) (00/80) 80 Nos. (100.00%) (80/80)
Q.2) What is your opinion about the duration a) Short b) Adequate c) Long	of Programme? 15 Nos. (17.64 %) (15/80) 62 Nos. (72.94 %) (72/80) 03 Nos. (09.41 %) (08/80)
 Q.3) Did you find the Programme useful? a) Very much b) To some extent c) Not useful 	73 Nos. (80.88 %) (73/80) 06 Nos. (12.94 %) (11/80) 01 Nos. (01.17 %) (03/80)
Q.4) Did it fulfill your expectations? a) Yes b) To some extent c) No	69 Nos. (86.20 %) (69/80) 06 Nos. (12.94 %) (11/80) 05 Nos. (05.90 %) (05/80)
 Q.5) Planning of the Programme a) Excellent b) Very good c) Good d) Satisfactory e) Poor 	71 Nos. (88.75 %) (71/80) 07 Nos. (10.58 %) (09/80) 02 Nos. (05.90 %) (05/80) 00 Nos. (00.00%) (00/80) 00 Nos. (00.00%) (00/85)



Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307.

COEM/MBA/2022-23

Date: 11th Aug. 2022

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To

Shri Vijaykumar H. Khasnis, Asscoiate V. P. – CDFD (Engg.) Bharat Forge Limited, Pune

Reg .: Invitation to conduct a "Guest - Lecturer" in our College.

Respected Madam,

It gives a great pleasure to introduce us with your esteemed organisation. We are an affiliated Institute of Savitribai Phule Pune University. Our parent trust **Pune District Education Association** is working in the field of Education since last 40 years and is headed by Hon. Ex-Deputy Chief Minister (Govt of Maharashtra) Shri. Ajit Dada Pawar.

We are engineering and Management Institute affiliated to Savitribai Phule Pune University and are operating since 1998. This is to invite you for an Expert Lecture to our students on the topic related to your field of expertise, i.e. on "Simulation Technique used in Bharat Forge".

This is to request you to inform us the suitable date and time in the coming week or fortnight, so that we can make arrangements for the same, expecting a positive response.

Sincerely Yours,

For PDEA's College of Engineering,

(Head of Department - MBA)

Head of Department-M.E.A. Pune District Education Association's College of Engineering, Pune.

Date: 18/08/2022

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COEM/MBA/2021-22

To,

Shri. Vijaykumar H. Khasnis, Asscoiate V. P. – CDFD (Engg.) Bharat Forge Limited, Pune

Letter of Appreciation

On behalf of the PDEA's College of Engineering, Manjari (Bk.), I would like to extend our most heartfelt thanks and the appreciation for being our Expert Guest Lecturer on 18th Reprusery 2022 on the topic "Simulation Technique used in Bharat Forge". Your attendance to the said event made it more meaningful and memorable for us and our students.

Thank you for sharing us part of your valuable time and the great experience. The insights you shared to the students and everyone present during the activity was informative and inspiring. It reminded us all to give our best in everything we do even if we feel that we may not be repaid or recognized for our effort.

Thank you again and we expect the same cooperation in future.

Respectfully,

For PDEA's College Engineering,

(Prof. A.S. Deshpande)

Head of Department-M.B.A. Pune District Education Association's College of Engineering, Pune.



Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307.

Programme Completion Report ENTREPRENEURSHIP AWARENESS PROGRAM

1. Name of the Organization	1:	PDEA's College of Engineering, Manjari (Bk), Pune
2. Programme:		Entrepreneurship Awareness Program
3. Programme Location:		PDEA's College of Engineering, Manjari (Bk), Pune
4. Name of Coordinator:		Prof. Ajit S. Deshpande
5. Date of launching Promotic	nal Activities:	01/12/2022
6. Date of Selection (intervi	ew):	15/12/2022
7. Date of Commencement of	of Programme:	19/12/2022
8. Date of Completion of Pro	ogramme:	21/12/2022
9. Number of participants:		80 Nos.
	Male:	62 Nos.
	Female:	18 Nos.
10. Trade:		MBA 1 st & 2 nd Year Students
		a state

Destrange

Signature of Programme Coordinator

Principal Pune District Education Association's College of Engineering Manjiri (Bk), Pune - 412307.

Date: 10/01/2023

Pune District Education Association's

COLLEGE OF ENGINEERING, Manjari Bk, Pune-412307

FIRST YEAR ENGINEERING DEPARTMENT

COEM/FE/2022-23/ (103 A

Date :- 12-11-2022

To.

The Principal,

College of Engineering,

Manjari Bk, Pune 412307.

Sub :- Regarding the conduction of Orientation & Induction Programme for FE Students.

Res Sir,

W. r. t. above subject, First Year Engineering Department is going to be organized Orientation & Induction Programme i.e. from 15-11-2022 to 19-11-2022. The Speakers accepting the invitation by Mr. Sanjay Deoghare (AGM, HR & Personnel, Larson & Toubro Ltd.) and Prof. V. D. Navale (Career Counselor) on "Value Education" from 15-11-2022 to 18-11-2022. Approximate charges for the remuneration and other things is 25000/-.

As it is mandatory to conduct Induction Programme in First Year curriculum kindly permit us to organize the Induction Programme and sanction the budget for the same.

Thanking you.

Yours Sincerely

Melledo

Prof. M. P. Rananaware

For N.A. as Pes to Process

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Pune District Education Association's, College of Engineering, Manjari (Bk), Pune - 412307 INDUCTION PROGRAMME - TIME TABLE

ACADEMIC YEAR: 2022-23 Sem-1

Department:- First Year Engineering

With Effect From :- 15/11/2022

DAY/TIME	Division	Session 1:- 10.30 - 12.30		Session 2:- 01.30 - 03.30		Session 3:- 4.00 - 5.00
TUE	A B	Orientation Programme		Topic:- Value Education for Personality Development		
15/11/2022 C	C D	Speaker:-Mr. Sanjay Deoghare		Speaker:- Prof. V. D. Navle		
WED 16/11/2022	A			Topic:- Value Education for Personality Development		Interactive Session with
	В	Topic:- Value Education and Ethics in Career				
	С				= /0	Class Teachers
	D	Speaker:- Prof. V. D. Navle	-unh Brea	Speaker:- Prof. V. D. Navle	Shor Brea	
THU 17/11/2022	A		7×1		×+	
	В	Topic:- Value Education and Ethics in Entrepreneurship		Topic:- Value Education for Skill Development		Library Session (Div:- A & B)
	С	Development				
	D	Speaker:- Prof. V. D. Navle		Speaker:- Prof. V. D. Navle		TGS Session (Div:- C & D)
FRI 18/11/2022 -	A	Tanin Value Education and		Tania: Value Education for		
	В	Ethics in Career		Skill Development		Library Session (Div:- C & D)
	С	Speaker:- Prof. V. D. Navie				TGS Session (Div:- A & B)
	D		34-1	Speaker:- Prof. V. D. Navle		
SAT 19/11/2022	A		199. 1	Topic:- Importance of reading		Real Contraction
	В	Training and Placement Session		and value of Library		
	С	Speaker:- Prof. A.A. Jadhav		Speaker:- Prof. Sonober Kazi	1	
1.11.27	D		1.00			

Ref. No. : COEM/FE/2022-23/ 1104

Date : 14th Nov. 2022

To, Mr. Sanjay Deoghare AGM, HR & Personnel, Larsen & Toubro Limited.

Subject: - Invitation for a Guest lecture for Orientation Programme.

Sir,

We are very proud to invite you as a Guest for "Orientation Programme for First Year Engineering Students" on 15-11-2022 at P.D.E.A.'S College of Engineering Manjari. Your profound knowledge in the field of Engineering and your motivational approach will help to participants understand challenges in professional & technological environment.

Thanking You,

Date :- 14th Nov. 2022

Yours sincerely Dr. R. V. Patil

Principal Pune District Education Association's College of Engineering Manjari (Br.)

OC

Date: 15th Nov. 2022

Ref. No. : COEM/FE/2022-23/ 1106

To, Mr. Sanjay Deoghare AGM, HR & Personnel, Larsen & Toubro Limited.

Subject: - Letter of Thanks.

We are very much thankful to you for accepting our invitation for delivering Guest lecture for Orientation Programme on 15th Nov. 2022. We hope that you will find the experience personally rewarding for agreeing to attend in this wonderful opportunity to recognize talented, hard working young people.

Your Direction is worth for us in respective area.

Thanking You,

Sir,

Date:- 15th Nov. 2022

Yours sincerely

Dr. R.V. Patil

Principal

Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307.

00


Pune District Education Association's COLLEGE OF ENGINEERING

Manjari (BK.), Pune - 412 307 (Maharashtra) India

Ph.: 020 - 26996625 | Fax:: 020 - 26996275 | E-mail: coem@pdeapune.org | Web: www.pdeacoem.org



NAAC Accredited **

Hon. Ajit Pawar President

Rajendra Ghadge Vice President

Sandeep Kadam

Hon, Secretary Senate Member, Savitribal Phulo Pune University, Pune.

Adv. Mohanrao Deshmukh Treasurer

L. M. Pawar Dy. Secretary

Dr. R. V. Patil Principal Ref. No. : COEM/FE/2022-23/ 1105

To, Prof. V. D. Navale, Career Counselor, Pune

> Subject: - Invitation for a Guest for Induction Programme. Sir,

We are very proud to invite you as a Guest for One week Induction Programme on 'Value Education & Ethics in Career' at P.D.E.A.'S College of Engineering Manjari. Your profound knowledge in the field of Engineering and your motivational approach will help to participants understand challenges in professional & technological environment.

Details of the Seminar: - 'Value Education'

Date:- 15th Nov. 2022, 16th Nov. 2022, 17th Nov. 2022, 18th Nov. 2022, 19th Nov. 2022.

Venue: College of Engineering, Manjari, Pune- 412307

Thanking You,

Date :- 14th Nov. 2022

Yours sincerely Dr. R. Y. Patil

Date : 14th Nov. 2022

Principalal

Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307



Pune District Education Association's **COLLEGE OF ENGINEERING**

Manjari (BK.), Pune - 412 307 (Maharashtra) India



Date: 18th Nov. 2022

Ph.: 020 - 26996625 | Fax.: 020 - 26996275 | E-mail: coem@pdeapune.org | Web: www.pdeacoem.org

Approved by A.I.C.T.E., New Delhi No. 740-89-316 E/ET/98 | A.I.S.H.E. Code No. C-41924 Affiliated to Savitribal Phule Pune University, Pune | DTE Code - 6206 | Pune Uni. Code : 4026 (Engg.), 1223(MBA) # NAAC Accredited #

Hon. Ajit Pawar President

Rajendra Ghadge Vice President

Sandeep Kadam Hon. Secretary Senate Member, Savitribal Phule Pune University, Pune.

Adv. Mohanrao Deshmukh Treasurer

L. M. Pawar Dy. Secretary

Dr. R. V. Patil Principal

Ref. No. : COEM/FE/2022-23/ 1118

To. Prof. V. D. Navale,

Career Counselor, Pune

Subject: - Letter of Thanks. Respected Sir.

We are very much thankful to you for accepting our invitation for delivering Guest lecturers for FE Induction Programme from 15th Nov. 2022 to 18th Nov. 2022. We hope that you will find the experience personally rewarding for agreeing to attend in this wonderful opportunity to recognize talented, hard working young students.

Your Direction is worth for us in respective area.

Date:- 15th Nov. 2022, 16th Nov. 2022, 17th Nov. 2022, 18th Nov. 2022.

Thanking You.

Date:- 18th Nov. 2022

Yours sincerely

Dr. R. V. Patil Principal

Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307

Date : 15th Nov. 2022

Ref. No. : COEM/FE/2022-23/1106 A

To, Prof. Sonober Kazi, Librarian, P.D.E.A'S Law College, Hadapsar.

Subject: - Invitation for a Guest for Induction Programme.

Respected Madam,

We are very proud to invite you as a **Guest** for **Induction Programme** on **'Importance of reading and value of Library'** at P.D.E.A.'S College of Engineering Manjari. Your profound knowledge in the field of Engineering and your motivational approach will help to participants understand challenges in professional & technological environment.

Details of the Seminar: - 'Importance of reading and value of Library'

Date:- 19th Nov. 2022.

Venue: College of Engineering, Manjari, Pune- 412307

Thanking You,

Date :- 15th Nov. 2022

Bur 1.22

Yours sincerely

Dr. R. V. Patil Principal Principal Pune District Education Association's College of Engineering Manjari (Bk.) Pune - 412307

Ref. No. : COEM/FE/2022-23/ 1119

Date: 19th Nov. 2022

To, Prof. Sonober Kazi, Librarian, P.D.E.A'S Law College, Hadapsar.

Subject: - Letter of Thanks.

Respected Madam,

We are very much thankful to you for accepting our invitation for delivering Guest lecturers for FE Induction Programme on 19th Nov. 2022. We hope that you will find the experience personally rewarding for agreeing to attend in this wonderful opportunity to recognize talented, hard working young students.

Your Direction is worth for us in respective area.

Date:- 19th Nov. 2022.

Thanking You,

Date:- 19th Nov. 2022.

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Yours sincerely

Dr. R. V. Patil Principal

un

Pung District Education Association's College of Engineering Manjari (Bk.). Pune - 412307

PDEA's, College of Engineering, Manjari (Bk), Pune - 412307 Department:- First Year Engineering INDUCTION PROGRAMME

ACADEMIC YEAR: 2022-23

Lecture on "Orientation Programme for First Year Engineering Students" by Mr. Sanjay Deoghare On 15-11-2022 Session:- I













Lecture on "Value Education for Personality Development" by Prof. V. D. Navle On 15-11-2022 Session:- II













Lecture on "Training and Placement" by Prof. A. A. Jadhav On 19-11-2022 Session:- I













Lecture on "Importance of Reading and Value of Library" by Prof. Sonober Kazi On 19-11-2022 Session:- II











SHIKSH.

19/11/22 02:54 PM

Google







Pune District Education Association's COLLEGE OF ENGINEERING

Manjari (BK.), Pune - 412 307 (Maharashtra) India Ph.: 020 - 26996625 Fax: 020 - 26995275 E-mail: coem@pdeapune.org Web::www.pdeacoem.org

Approved by A.I.C.T.E., New Delhi No. 740-89-316 E/ET/98 A.I.S.H.E. Code No. C-41924 Affiliated to Savitribai Phule Pune University, Pune DTE Code - 6206 Pune University Code - 4026 (Engg.), 1223(MBA) NAAC Accredited *

Ref. No. : COEM/TP/2022-234.00

Date : 04/05/2023

Hon. Ajit Pawar President

Rajendra Ghadge Vice President

Sandeep Kadam Hon, Secretary Ste Member Solariba Phule Pune University, Pune

Adv. Mohanrao Deshmukh Treasurer

L. M. Pawar Dy. Secretary

Dr. R. V. Patil Principal

Recieved

To,

Ms. Rashmi Rani,

Skill Trainer,

Rubicon, Pune

Subject: - Invitation for conduction of Rubicon Skill WORKSHOP (4-Days)

Respected Sir,

We, on behalf of PDEA's College Of Engineering, Manjari, are delighted to welcome you as a guest to the "Rubicon Skill WORKSHOP (4-Days) for all students" from 9th May to 12th May 2023 at P.D.E.A.'s College Of Engineering, Manjari. Your extensive expertise in the topic of Career skills, Soft Skills, Interview preparation etc will help students be aware and be a good impactful person in their further life.

Thank You.

Hadhor

Prof. Anuradha A. Jadhav Training & Placement Officer Pune District Education Association's College of Engineering, Manjari (BK.), Pune - 412 307

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Yours sincerely

Dr. R. V. Patil.

Principal Pune District Education Association College of Engineering, Manjari (5x.) Pune - 412-27



Pune District Education Association's COLLEGE OF ENGINEERING

Manjari (BK.), Pune - 412 307 (Maharashtra) India Ph. 020 - 26996625 Fax 020 - 26996275 E-mail coem@pdeapune.org Web : www.pdeacoem.org Contraction of the line

Approved by A.I.C.T.E., New Delhi No. 740-89-316 E/ET/98 AISHE Code No. C-41924 Affiliated to Savizibai Phule Pune University, Pune DTE Code - 6206 Pune Univ. Code : 4026 (Engg.), 1223(MBA.)

NAAC Accredited .

Ref. No. : COEM/TP/2022-23/349

Date: 12/05/2023

Hon. Ajit Pawar President

Rajendra Ghadge Vice President

Sandeep Kadam Hon, Secretary Secretary Member, Sanitosi Phule Pune University, Pune

Adv. Mohanrao Deshmukh Treasurer

L. M. Pawar Dy. Secretary

Dr. R. V. Patil Principal

Recieved

To,

Ms. Rashmi Rani, Skill Trainer,

Rubicon, Pune

Subject: - Letter of Appreciation.

Respected Sir,

You have our sincere gratitude for agreeing to conduct sessions from 9th May to 12th May 2023, about the "Rubicon Skill WORKSHOP (4-Days) for all students" as well as For agreeing to attend and conduct this fantastic opportunity to recognise and orient outstanding, diligent young students, we sincerely hope that the experience will be personally fulfilling for you. Our students got the information which will be useful for their lifetime.

Your Direction is worth it for us.

Thank You.

Hadhe

Prof. Anuradha A. Jadhav Training & Placement Officer Pune District Education Association's College of Engineering, Manjari (BK.), Pune - 412 307



Yours sincerely

Dr. R. V. Patil. Principal Pune District Education Association's College of Engineering Manjari (Bk.). Pune - 412307.



PUNE DISTRICT EDUCATION ASSOCIATION'S COLLEGE OF ENGINEERING

Manjari (BK), Pune - 412307 (Maharashtra) India

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Training & Placement Department

Date: 12/05/2023

To, The Principal, PDEA's COEM, Pune.

Subject : Payment Receival

Respected Sir,

Conducted drive for company - Rubicon skill workshop 9 mm and Selected NA Students and Shortlisted NA Students. Package given for the students is Rs. NA

The Travelling / Overall allowances received amounting Rs. 4001-

Looking forward to your cooperation for the betterment of students.

Thank You.

Name - Ms. Rashmi Rahi Company Name - Rubicon [4 Days Workshop]

Sincerely,

Recieved - 14th Tuly

Pune District Education Association's **College of Engineering** Manjari(Bk), Pune - 412307 Name: Mrs Rashmi Rani Voucher No:- 02 Account :-Date :- 12/05/23 Department: - Trainer for skill workshop L (Arranged by TPO) by Rubicon Particulars Rate Amount TA for of Day RS. 4001-RS400L 1) Rs.400/-13

eceived From the Principal, College of Engineering Manjari (Bk), Pune- 07 upees (In word) :-

specified above by Cash/Cheque No. assed for Payment. Date :- 12/5/23

Recieved -: 16

Principal P.D.E.A's Illege of Enginnering Ianjari(Bk), Pune-07

Accountant P.D.E.A's College of Engineering Manjari(Bk), Pune- 07

Revenue
Stamp
Over

Rs.500/-



P.D.E.A'S COEM ENTREPRENEURSHIP CELL VISIT TO STARTUP EXPO AT COEP'23

E-Cell Member , Shahid Shaikh visited to Startup Expo Organized By BHAU's Innovation & Entrepreneurship Cell, at COEP



College of Engineering Pune Wellesley Rd, Shivajinagar, Pune, Maharashtra 411005





P.D.E.A'S COEM ENTREPRENEURSHIP CELL VISIT TO STARTUP EXPO AT COEP'23





P.D.E.A'S COEM ENTREPRENEURSHIP CELL IDEA GENERATION COMPETITION'23





ENTREPRENUERSHIP CELL

P.D.E.A'S COEM IN ASSOCIATION WITH ENTREPRENUERSHIP CELL PRESENTS

IDEA GENERATION COMPETITION '23

Event Posters



Prof. Anuradha A Jadhav - Oreinting the participants and audience



P.D.E.A'S COEM ENTREPRENEURSHIP CELL IDEA GENERATION COMPETITION'23

E-Cell Team







International Journal on Recent and Innovation Trends in Computing and Communication ISSN: 2321-8169 Volume: 11 Issue: 4 DOI: https://doi.org/10.17762/ijritcc.v11i4.6453 Article Received: 06 February 2023 Revised: 15 March 2023 Accepted: 25 March 2023

Context Mining with Machine Learning Approach: Understanding, Sensing, Categorizing, and Analyzing Context Parameters

Mrs.Pranali G.Chavhan¹, Dr. Ritesh V. Patil², Dr. Parikshit N.Mahalle³

¹Department of Computer Engineering Vishwakarma Institute of Information Technology Pune, India pranali.chavhan@viit.ac.in ²Department of Computer Engineering PDEA's College of Engineering, Manjari (Bk.) Pune, India rvpatil3475@yahoo.com ³Department of Computer Engineering Vishwakarma Institute of Information Technology Pune, India parikshit.mahalle@viit.ac.in

Abstract— Context is a vital concept in various fields, such as linguistics, psychology, and computer science. It refers to the background, environment, or situation in which an event, action, or idea occurs or exists. Categorization of context involves grouping contexts into different types or classes based on shared characteristics. Physical context, social context, cultural context, temporal context, and cognitive context are a few categories under which context can be divided. Each type of context plays a significant role in shaping our understanding and interpretation of events or actions. Understanding and categorizing context is essential for many applications, such as natural language processing, human-computer interaction, and communication studies, as it provides valuable information for interpretation, prediction, and decision-making.

In this paper, we will provide an overview of the concept of context and its categorization, highlighting the importance of context in various fields and applications. We will discuss each type of context and provide examples of how they are used in different fields. Finally, we will conclude by emphasizing the significance of understanding and categorizing context for interpretation, prediction, and decision-making.

Keywords-Context, Context awareness, Taxonomy of Context, Internet of Behaviour, Ubiquitous of Computing, User preference

I. INTRODUCTION

Context is a fundamental concept that plays a significant role in shaping our understanding and interpretation of events, actions, or ideas. Context is a fundamental concept that refers to the background, environment, or situation in which something occurs or exists. It is a crucial aspect of human understanding, and it plays a vital role in shaping our perception of events or actions. In different fields, such as linguistics, psychology, and computer science, context is essential for interpreting and analyzing various phenomena. Understanding context is crucial for natural language processing, machine learning, decision-making, and communication studies.

Context can be categorized in different ways, and each categorization defines a set of parameters that characterize the context. These parameters provide a framework for analyzing and interpreting context. Some of the common parameters used for categorizing context include:

1) *Physical Context*: Physical context refers to the physical environment in which an event or action occurs. The parameters that define physical context include location, weather conditions, and objects present in the surroundings. For example, the physical context of a conversation could be a coffee shop, a park, or an office[1].

2) *Social Context:* Social context refers to the social setting or relationships between people involved in an event or action. The parameters that define social context include the relationship between the people involved, their roles, and their social status. For example, the social context of a conversation could be a formal meeting, a casual chat, or a job interview[1][2].

3) *Cultural Context:* Cultural context refers to the cultural norms, values, and beliefs that influence an event or action. The parameters that define cultural context include language, customs, traditions, and religion. For example, the cultural context of a conversation could be a Western or Eastern culture, a religious or secular context.



Multi-attribute Group Decision-making Based on Hesitant Bipolar-valued Fuzzy Information and Social Network

Dhanalakshmi R¹, Sovan Samanta², Arun Kumar Sivaraman³, Jeong Gon Lee^{4,*}, Balasundaram A⁵, Sanamdikar Sanjay Tanaji⁶ and Priya Ravindran⁷

¹Department of Computer Science and Engineering, KCG College of Technology, Chennai, 600097, Tamil Nadu, India ²Department of Mathematics, Tamralipta Mahavidyalaya, West Bengal, 721636, India

³School of Computer Science and Engineering, Vellore Institute of Technology, Chennai, 600127, Tamil Nadu, India ⁴Division of Applied Mathematics, Wonkwang University, Iksan-Si, Jeonbuk, 54538, Korea

⁵School of Computer Science and Engineering, Center for Cyber Physical Systems, Vellore Institute of Technology, Chennai,

600127, Tamil Nadu, India

⁶Department of Instrumentation Engineering, PDEAs College of Engineering, Manjari, 412307, Pune, India

⁷Engineering and Research Services, HCL Technologies, Chennai, 600119, India

*Corresponding Author: Jeong Gon Lee. Email: jukolee@wku.ac.kr

Received: 20 December 2021; Accepted: 27 February 2022

Abstract: Fuzzy sets have undergone several expansions and generalisations in the literature, including Atanasov's intuitionistic fuzzy sets, type 2 fuzzy sets, and fuzzy multisets, to name a few. They can be regarded as fuzzy multisets from a formal standpoint; nevertheless, their interpretation differs from the two other approaches to fuzzy multisets that are currently available. Hesitating fuzzy sets (HFS) are very useful if consultants have hesitation in dealing with group decision-making problems between several possible memberships. However, these possible memberships can be not only crisp values in [0,1], but also interval values during a practical evaluation process. Hesitant bipolar valued fuzzy set (HBVFS) is a generalization of HFS. This paper aims to introduce a general framework of multi-attribute group decision-making using social network. We propose two types of decision-making processes: Type-1 decision-making process and Type-2 decision-making process. In the Type-1 decision-making process, the experts' original opinion is proces for the final ranking of alternatives. In Type-2 decision making processs, there are two major aspects we consider. First, consistency tests and checking of consensus models are given for detecting that the judgments are logically rational. Otherwise, the framework demands (partial) decision-makers to review their assessments. Second, the coherence and consensus of several HBVFSs are established for final ranking of alternatives. The proposed framework is clarified by an example of software packages selection of a university.

Keywords: Group decision-making; aggregation operators; hesitant bipolarvalued fuzzy set

ct Education Associa llege of Engineering Manjari (9k.) ne - 412307



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Advisory System for Biodiesel Production

Satish A. Patil^{1,a)} and R. R. Arakerimath^{2,b)}

¹Mechanical Engineering Department, PDEA's College of Engineering, Manjari (Bk), Pune. (MS), India ² Mechanical, G H Raisoni College of Engineering and Management, Wagholi, Pune, Savitribai Phule Pune University, Pune, India.

a) corresponding author: sapcoeh@rediffmail.comb) rrarakerimath@gmail.com

Abstract: Advisory system is the decision-maker for many problems. That will help to frame the solutions for themselves. Transesterification is one of the best methods for biodiesel synthesis from vegetable oils. Here the study of optimization of Transesterification is done by using three different heterogeneous catalysts separately from Karanja oil. Results are analyzed by the Taguchi method for input parametric optimization for Karanja biodiesel production using three different heterogeneous catalysts. Three different mathematical models are obtained by using the Taguchi method. These mathematical models are used for the development of the advisory system. The advisory system is developed by using Visual Basic software. Only by putting the input parameters, one can obtain output parameters without any experimentation work. Keywords—Biodiesel, Transesterification, Heterogeneous, Catalyst, Optimization

INTRODUCTION

In unstructured situations, advisory systems are used to contribute to decision-making. In the advisory systems research work, it is found that for many problems the decision-maker needs the identification of the problem. That will help to frame the solutions for themselves. As we know Transesterification is one of the best methods for biodiesel synthesis from vegetable oils. There is a need for optimization of this process using the heterogeneous catalyst and find out the best heterogeneous catalyst. So, the study of optimization of Transesterification is done for three different heterogeneous catalysts separately from Karanja oil. This study is helped to find out the best heterogeneous catalyst for biodiesel production [1, 4].

Twenty-five numbers of experiments were conducted as per Taguchi developed array using the given parametric conditions namely the molar ratio (MR) with catalyst concentration (CC) maintaining process temperature (PT) and time required (RT) controlling stirring (agitating) speed (SS) for three different catalysts [6,9]. The Karanja oil yield values obtained through the experimentations have been noted [6, 8]. Results were analyzed by the Taguchi method for input parametric optimization for Karanja biodiesel production using three different heterogeneous catalysts. Three different mathematical models are obtained by using the Taguchi method. These mathematical models are used for the development of the advisory system. This advisory system is developed for obtaining the output parameter values and graphs by just putting the input parameter values. The advisory system is developed by using Visual Basic. Only by putting the input parameter values, one can obtain output yield value without any experimentation work.

Biodiesel

Alternated fuel to petrodiesel may have suitable and technically acceptable. Biodiesels are produced from the fats of animals and mostly from vegetable oils. These are treated as an alternative to diesel engines. The various plants give edible or non-edible oils [5]. These contain various edibles oil plants like soybean, palm, sunflower, rapeseed, etc., and non-edibles oil plants like Jatropha, Mahua, Castor, Neem, Karanja, etc. In India biodiesel is obtained from

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9th National Conference on Recent Developments in Mechanical Engineering [RDME 2021] AIP Conf. Proc. 2469, 020021-1–020021-10; https://doi.org/10.1063/5.0080220

Analysis of Heterogeneous Catalyzed Castor oil Biodiesel

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Abstract. The different catalysts are having an important key role for production (synthesis) of biodiesel. The heterogeneous catalysts are economically and commercially used especially in biodiesel industries. These catalysts are produced from the waste materials at a minimum cost. There is an interesting research area to find such waste materials for the preparation of the catalyst. Such materials are having a wide source and low cost. These eco-friendly waste catalysts can also use in some other organic reactions. Here Castor oil is used for biodiesel production through transesterification process. Castor oil biodiesel and its blends are used for testing of the IC engine. The analysis of results for performance and emission are discussed here. The results of different Castor Biodiesel blends are compared with petrodiesel. From the observations and results, this is concluded that the Castor biodiesel blends up to 20% by volume with diesel fuel can be replaced the pure diesel for existing diesel engine running. There are fewer emissions of exhaust gases without any drastic changes the conventional engines and with not losing any power outputs. This may help a large for reducing exhaust gas air pollution.

Keywords: Biodiesel, Synthesis, Transesterification, Catalyst, Heterogeneous.

INTRODUCTION

Today, the world is getting evolved in every sector of life. The population is increasing on each successive day at a tremendous rate. As a result of this ever-increasing human population, there are growing needs about everything which are fulfilled by nature only. The India having the huge challenges for meeting the energy needs. Diesel is commonly used in the industries as well as for the transportation purpose [1]. India as an agricultural country requires a large amount of diesel to meet the diesel requirement to run the agricultural equipment based on the diesel engine. The diesel engines are commonly used to produce the power in the medium and heavy-duty applications because of their lower fuel consumption and portability. The performance and emission results using Castor biodiesel blends obtained are analyzed and discussed.

RESEARCH WORK

In this research work mainly there are two different experimental setups are used. One is for the production of biodiesel from vegetable oil using the transesterification process. Another is for testing of engine for performance, emission analysis of the engine with diesel and castor biodiesel blends [2]. Performance and emission characteristics of biodiesel blends obtained are studied. These results are compared with diesel fuel.

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3rd International Conference on Computational and Experimental Methods in Mechanical Engineering (11-13 February-2021) AIP Conf. Proc. 2427, 020009-1–020009-10; https://doi.org/10.1063/5.0100846 Published by AIP Publishing, 978-0-7354-4312-9/\$30.00

International Journal of Mechanical Engineering

Biodiesel Fueled Engine Vibration Studies by Taguchi Method and Results Validation by ANN

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Abstract – Renewable and environmentally friendly biodiesel is a fuel that can provide comparative engine performance. The diesel engine performance, noise, and vibration parameters were studied. Vibration and noise production due to the combustion of fuel in engines have a direct effect on engine performance. Therefore, in this paper, the study of three different vibration parameters are mainly displacement, velocity, and acceleration was carried out with both diesel and biodiesel blends. Kirloskar makes single-cylinder, 4 strokes, water-cooled, 3.5 KW at 1500 rpm, diesel engine with water-cooled eddy current dynamometer was used. The output vibration parameters were measured using vibrometer, engine noise by noise meter, and also other measuring instruments. The testing of the engine was carried out at different loads as per the orthogonal array obtained by Minitab from the input parameters. The orthogonal array selection was based on three parameters and the four levels for each parameter. The experimental output conditions with optimal input parameters blend B15, applied load 7 kg, compression ratio18 are vibration parameters such as Displacement 0.458 mm, Velocity 23.68 mm/s, and Acceleration 345.5m/s2. The regression plot for acceleration obtained by Taguchi is compared with the ANN regression plot. There is a similarity in these plots. Hence results are validated by ANN.

Keywords: Biodiesel, Karanja oil, Velocity, Acceleration, Vibration.

I. Introduction

Utilization of diesel fuels in various zones and having importance for the national economy, the alternative to diesel fuel must be comparable, technically, and economically acceptable. Biodiesel is obtained by the transesterification process from different oils of vegetable and animal fats which are renewable sources with alcohol [1]. Due to the environmentally friendly properties of biodiesel, it has an internationally focused substitute for diesel fuel. Biodiesel may be used in the existing C I engine without any alterations [1].

Engine body vibrations give information about its operating parameters and the physical condition of the engine. It could be measured by attaching a vibrometer on the top of the engine head. Some researchers are working on the engine vibrations using biodiesel blends in comparison with petrodiesel over the world [2]. The study is focused differently to extract useful information about diesel engine operating conditions. Here the diesel engine vibration parameters were studied with given input parameters to the engine. The three parameters used in vibration measurement are mainly displacement, velocity, and acceleration. Velocity and acceleration are much important depending on the frequency range. An accelerometer was mounted vertically on the engine head using a powerful magnet supplied [3].

Excess vibrations wear out different engine components, loosening affect the alignment of foundation, damage of supporting structure. The maintenance cost increases because of more component failures and unplanned operations [4]. It can also affect the balance, risk of fatigue components, decreased engine efficiency, and finally engine life. So, it's essential to search the effect of different biodiesel blends on engine life. The study of different parameters of vibrations is more important because they affect engine performance as well as engine life [4]. It's a necessity to enhance engine life by optimal use of blends by analysis of vibrations of the engine. And to find out the best biodiesel blends for better performance and enhanced engine life.

II. Experimental Setup

In this experimental setup a Kirloskar made, variable compression ratio engine has used. The detailed engine specifications have as below. The computer controlled system test bed has equipped with eddy current dynamometer, thermocouples, tachometer, flow meters, and all other required measuring instruments.

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International Journal of Mechanical Engineering 333

Vol 22)

Pune District Education Association College of Engineering Manjari (Bk. Pune - 412307.

Contents lists available at ScienceDirect



Journal of King Saud University – Engineering Sciences

journal homepage: www.sciencedirect.com

Original article

Fabrication of medium scale 3D components using a stereolithography system for rapid prototyping



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ARTICLE INFO

Article history: Received 24 August 2020 Accepted 17 February 2021 Available online 25 February 2021

Keywords: Stereolithography DLP projector Photopolymer Rapid prototyping STL file

ABSTRACT

A cost-effective stereolithography for medium-scale components is developed to fabricate 3D components with high build speed and resolution from photo-curable resin. The developed SLA utilizes a focused light beam of wavelength range (300 nm - 700 nm) coming from the DLP projector, passes through the objective lens, and finally is imposed on the platform containing a photo-curable resin layer. After focusing the light beam on the liquid resin layer, the photo-polymerization reaction occurs, and the liquid resin becomes solid. Thus, the 3D object is fabricated layer by layer, curing of liquid resin. The photopolymer used in this experiment is polyethylene glycol di-acrylate, and Irgacure 784 as photo-initiator. The Creo 3.0 software is used for the modeling of 3D objects. A special MATLAB code is developed for slicing of the 3D model and displaying the sliced image one by one through the DLP projector. The Arduino microcontroller with a stepper motor and ball screw is used to control the motion of the Z-stage platform. The Creation workshop software is also used to control the motion of the Z-stage and period to display the sliced images through the DLP projector. The medium-scale 3D objects with rectangular, square, and circular cross-sections are obtained by curing the aforementioned photo-curable resin. It is observed that the 3D objects are best cured for two seconds curing time with 0.1 mm curing depth along Z-axis. © 2021 The Authors. Production and hosting by Elsevier B.V. on behalf of King Saud University. This is an open access article under the CC BY-NC-ND license (http://creativecommons.org/licenses/by-nc-nd/4.0/).

1. Introduction

The manufacturing industries today face the challenges of new product design, development, and the launching of products quickly. The market at the local, as well as the international level,

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Peer review under responsibility of King Saud University.

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changes in manufacturing methods and technology, changes in product requirements, changes in present products, and a small product development period. Therefore, for the successful launching of any product, the rapid time to market must be as minimum as possible (Krar and Gill, 2003). The technology known as rapid prototyping (RP) reduces product development costs and periods. This advanced technology allows complex three-dimensional (3D) models or components to be fabricated. Rapid prototypes of the different objects are also required before their actual manufacturing so one can improve their design early. One of the main advantages of RP is that it enhances the verification of product design. The RP part reduces the product cost over traditional methods in the product development cycle (Wohlers, 1999). The designers can check out their concepts and ideas by using RP parts before manufacturing tools for fixtures and moulds. The rapid prototyping field is very fast developing and applies to all products, i.e., engineering and nonengineering. The major disadvantage of the RP parts is that the functional tests carried out on RP parts should be within limits of the physical properties of the fabricated parts.

is very fluctuating and highly unpredictable. These are due to

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Abbreviations: 2D, Two dimensional; 3D, Three dimensional; CAD, Computeraided design; DLP, Digital light processing; FDM, Fused deposition modeling; LCD, Liquid crystal display; MEMS, Micro-electro-mechanical systems; MSL, Micro stereolithography; RP, Rapid Prototyping; SLA, Stereolithography; STL, Standard tessellation language; UV, Ultra-violet.

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ELSEVIER

FULL RESEARCH ARTICLE



Process parameter's characterization and optimization of DLP-based stereolithography system

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Received: 25 March 2022 / Accepted: 6 October 2022 / Published online: 26 October 2022 © The Author(s), under exclusive licence to Springer Nature Switzerland AG 2022

Abstract

The low-cost digital light processing (DLP) based stereolithography (SLA) system is developed to build 3D objects from the liquid photopolymer. The DLP projector is used as a UV light source and DMD chip already present in the projector is used as a dynamic pattern generator. The light beam from DLP projector passed through the focusing lens and then projected on a layer of liquid photopolymer which is settled on the platform. The liquid resin layer is solidified by photo-polymerization process and thus 3D objects are fabricated by layered manufacturing technique. The experimental results are validated by characterizing the process parameters. The process parameters are characterized using the method of least square which is the in-built function in the MATLAB software, and a separate code is developed for the same. A good correlation is observed between the experimental values and numerical results. The maximum dimensional error difference between the experimental and numerical methods is 9.94%. The MATLAB code is also written for the optimization of the process parameters using *fminunc* function and gradient descent algorithm. The best set of parameter values is found and it is observed that the optimized values are close to the experimental values. The maximum difference observed between the experimental and optimized values is 9.13%. The novelty of this work is that the medium-scale 3D components are successfully fabricated with good accuracy, build speed and resolution. The methodology developed for the characterization and optimization of process parameters can be applied to any newly designed SLA system.

Keywords Photopolymer \cdot DLP projector \cdot Stereolithography \cdot Characterization \cdot Optimization

Abbreviations

Digital light processing
Stereolithography
Microstereolithography
Three-dimensional
Polyethylene glycol di-acrylate
Computer aided design
Liquid crystal display

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T TT 7	T T1
UV	Ultra violet
2D	Two-dimensional
RP	Rapid prototyping
AM	Additive manufacturing
DMD	Digital micro-mirror device
MEMS	Micro electro-mechanical systems
FEM	Finite element method
DSC	Differential scanning calorimetry
CLIP	Continuous liquid interface production
FDM	Fused deposition modeling
GDM	Gradient descent method
FEA	Finite element analysis
LT	Layer thickness
NoL	Number of layers
ET	Exposure time
SP	Settling period
RP AM DMD MEMS FEM DSC CLIP FDM GDM FEA LT NoL ET SP	Rapid prototyping Additive manufacturing Digital micro-mirror device Micro electro-mechanical systems Finite element method Differential scanning calorimetry Continuous liquid interface production Fused deposition modeling Gradient descent method Finite element analysis Layer thickness Number of layers Exposure time Settling period



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Multi-attribute Group Decision-making Based on Hesitant Bipolar-valued Fuzzy Information and Social Network

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Received: 20 December 2021; Accepted: 27 February 2022

Abstract: Fuzzy sets have undergone several expansions and generalisations in the literature, including Atanasov's intuitionistic fuzzy sets, type 2 fuzzy sets, and fuzzy multisets, to name a few. They can be regarded as fuzzy multisets from a formal standpoint; nevertheless, their interpretation differs from the two other approaches to fuzzy multisets that are currently available. Hesitating fuzzy sets (HFS) are very useful if consultants have hesitation in dealing with group decision-making problems between several possible memberships. However, these possible memberships can be not only crisp values in [0,1], but also interval values during a practical evaluation process. Hesitant bipolar valued fuzzy set (HBVFS) is a generalization of HFS. This paper aims to introduce a general framework of multi-attribute group decision-making using social network. We propose two types of decision-making processes: Type-1 decision-making process and Type-2 decision-making process. In the Type-1 decision-making process, the experts' original opinion is proces for the final ranking of alternatives. In Type-2 decision making processs, there are two major aspects we consider. First, consistency tests and checking of consensus models are given for detecting that the judgments are logically rational. Otherwise, the framework demands (partial) decision-makers to review their assessments. Second, the coherence and consensus of several HBVFSs are established for final ranking of alternatives. The proposed framework is clarified by an example of software packages selection of a university.

Keywords: Group decision-making; aggregation operators; hesitant bipolarvalued fuzzy set

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JETIR.ORG JETIR.ORG ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue JDURNAL OF EMERGING TECHNOLOGIES AND INNOVATIVE RESEARCH (JETIR) An International Scholarly Open Access, Peer-reviewed, Refereed Journal

Implementation of Fake News Detection Using Machine learning

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Abstract: The rise of fake news has posed a significant challenge within these networks, impacting our society. Detecting and combating fake news is crucial to ensure the reliability of information spread on social media platforms. This research proposes the utilization of machine learning techniques, specifically Natural Language Processing (NLP) algorithms, to detect fake news. The approach involves data normalization as a pre-processing step to clean the data before applying machine learning methods for classification. The model also considers the credibility of content and user reputation as factors in assessing the authenticity of news. The goal is to automate the detection process by training a model on a credibility-focused dataset, enabling accurate assessments of fake news on social media.

Index Terms - fake news, machine learning, NLP, information exchange, credibility, user reputation, Machine Learning

INTRODUCATION This research paper focuses on the detection of the research proposes an automated approach to detect fake news on social media using machine learning and NLP algorithms. The model considers content credibility and user reputation as factors to assess the authenticity of news. By leveraging these techniques, the research aims to enhance accuracy in identifying fake news and create a more trustworthy social media environment.

THE PROBLEM OF FAKE NEWS The problem of fake news has become increasingly pervasive in recent years, posing significant challenges to individuals, communities, and society as a whole. Here are some key points regarding the problem of fake news. Fake news is a pervasive issue resulting from the widespread use of social media and the manipulation of information. It spreads quickly through social media platforms, influences public opinion and beliefs, contributes to polarization, erodes trust in legitimate news sources, and poses challenges to maintaining an informed society. Combating fake news requires a multi-faceted approach involving technology, fact-checking organizations, media literacy programs, and user education. Collaboration among various stakeholders is necessary to address the problem effectively.4. Challenges in detection: Detecting fake news is a complex task due to its diverse forms and the speed at which it can spread. Fake news can range from subtly misleading content to outright fabricated stories. Moreover, technological advancements make it easier for malicious actors to create convincing and shareable fake news. Traditional fact-checking methods alone are often insufficient to keep up with the volume and velocity of fake news production.

IMPORTANCE The importance of fake news detection lies in its significant impact on individuals, communities, and society as a whole. Here are some key reasons highlighting the importance of detecting and combating fake news:

1.Protecting the public: Fake news can mislead and deceive people, leading them to form false beliefs or make ill-informed decisions. By detecting and exposing fake news, we can protect the public from being manipulated and ensure they have access to accurate and reliable information.

2.Preserving trust in information sources: Fake news undermines trust in traditional media outlets and legitimate news sources. By detecting and addressing fake news, we can preserve trust in reliable sources of information, maintaining the credibility and integrity of journalism and news reporting.

3.Safeguarding democracy: Fake news has the potential to distort public discourse, manipulate elections, and undermine democratic processes. By detecting and countering fake news, we can help safeguard the democratic principles of informed decision-making, open dialogue, and a well-informed citizenry.

4.Mitigating social polarization: Fake news often contributes to the polarization of society by reinforcing existing biases and creating divisions. By detecting and debunking fake news, we can promote critical thinking, reduce misinformation-driven polarization, and foster constructive dialogue among diverse groups.

5.Promoting media literacy: Fake news detection encourages media literacy and critical thinking skills. By educating individuals on how to identify and evaluate fake news, we empower them to become discerning consumers of information and better equipped to navigate the complex media landscape.

6.Enhancing social cohesion: Fake news can fuel tensions and conflicts within communities. By detecting and addressing fake news, we can promote a more unified and cohesive society, based on shared understanding and accurate information.

7.Supporting responsible journalism: Fake news detection helps differentiate between professional journalism and misinformation. By highlighting the importance of responsible reporting and fact-checking, we encourage ethical journalism practices and elevate the standards of news dissemination.

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Digital Voice Assistant[A Literature Survey]

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Keywords: Artificial Intelligence, machine learning, deep learning, NLP, NLU, Noise control

I. INTRODUCTION

Digital assistant is computer program designed to assist a user by answering questions and performing basic tasks. To interact with a digital assistant, must use a wake word, which device uses to activate the digital assistant. Digital assistant uses advanced Artificial Intelligence, natural language processing and understanding and machine learning. AI to learn as they go and provide a prenasalised, conservational communication. Combining historical information such as purchase preferences, home ownership, location, family size, so on, algorithms can create data models that identify patterns of behaviour and then refine those patterns as data is added. Existing examples of digital assistant are Apple's Siri, Google assistant, Alexa etc. Digital assistant gathers real time insights, which business can use to continually improve the user's experience and learn about their customers and employees

II. LITERATURE REVIEW

Artificial Intelligence has been in great use when it comes to day-to-day life. Computer science defines AI research as the study of brilliant agents. In almost any direction one turns today, some form of computer-based information processing technology intrudes, whether to the individual knowingly or not. Artificial Intelligence (AI) has already changed our lifestyle. AI device that perceives its environment and takes actions that maximize its chance of successfully achieving its goals. Input to recommendation algorithm can be a database of

Abstract— Digital Assistance is computer program specially dedicated to assist user by responding to queries and performing basic tasks. It collects real time observations, which is use for better user experience and learn about the user's behavior. The digital assistant focuses at serving, the following most common and popular utilizations of digital assistant which are, question answering or information retrieval and implementing various local and/or remote services to perform tasks. Digital assistants make a use of advanced artificial intelligence (AI), natural language processing, natural language understanding, and machine learning to learn more about user and their environment in order to provide a personalized, chatty experience. The technologies require for digital voice assistant development are: Speech-To-Text (STT) And Text-To-Speech (TTS), Noise Control, Natural Language Processing (NLP), Natural Language Understanding (NLU), Natural Language Generation (NLG) and Deep learning. Digital assistant system uses microphone to capture the voice input of a user as a primary input. Users make use of a Microphone to capture the spoken input and a speaker to provide responses. The command block contains the main components to navigate the conversation of digital voice assistant with the user. ASR (Automatic speech recognition) is a method recognizer for speech, it forwards the recognition speculation to the NLU. A Natural Language Understanding (NLU) component can extract meaning as commands and associated entities from a pronouncement as text strings. Data providers obtain data using standard dataset from various sources for the better interaction.

JETIR2212568 Journal of Emerging Technologies and Innovative Research (JETIR) <u>www.jetir.org</u> f552

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Digital Voice Assistant-Vision[implementation]

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Abstract- This paper shows the working of a device based on implementation of a voice command system as an intelligent personal assistant. The services provided by the device depends on the input given in the form of voice command by the user and ability to access information from a variety of online sources such as weather, telling time or accessing online applications to listen to music. This Voice driven device uses Raspberry Pi as its main hardware. Speech to text engine is used to convert the voice command to simple text. Query processing is then applied using natural language processing (NLP) onto this text to interpret the intended meaning of the command given by the user. After interpreting the intended meaning, text to speech conversion is used to give appropriate output in the form of speech. This device might provide a platform to visually impair to do their day to day tasks more easily like listening to music, checking weather conditions. ASR (Automatic speech recognition) is a method recognizer for speech it forward the recognition speculate to the NLU.

Keywords: Virtual Personal Assistant, Natural

Language Processing, Query Processing, Raspberry Pi, NLU.

I. INTRODUCTION

Digital assistant is computer program designed to assist a user by answering questions and performing basic tasks. To interact with a digital assistant, must use a wake word, which device uses to activate the digital assistant. Digital assistant uses advanced Artificial Intelligence, natural language processing and understanding and machine learning. AI to learn as they go and provide a prenasalised,

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conservational communication. Combining historical information such as purchase preferences, home ownership, location, family size, so on, algorithms can create data models that identify patterns of behaviour and then refine those patterns as data is added. Existing examples of digital assistant are Apple's Siri, Google assistant, Alexa etc. Digital assistant gathers real time insights, which business can use to continually improve the user's experience and learn about their customers and employees

II. SYSTEM REQUIREMENT

1. Hardware Requirement :

- a. Microphone: The vocal commands given by the user which is used as input is given in through the microphone that is connected to the device. This vocal command is then later converted to simple text and keywords are searched through this text which helps the device to perform its functions and give out the expected results.
- b. Raspberry Pi: Raspberry Pi is the major component of the device. It acts as a mini computer. It is indulged in all the activities since the beginning when the user gives the input till the end when the output is presented to the user. It sorts of binds all the components together. All the processing of the data takes place here.
- c. Ethernet: The Ethernet cable helps us to provide the internet connection to the device. Internet plays a very important role in the operation of the device as it helps the device to do speech to text conversion, query processing through NLP and text to speech conversion. All these processes take place online that's why the internet connection is very essential.
- d. Speaker: Speaker performs the last function in this process. The speaker helps the device to give out the

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Survey on Techniques for Predictive Analysis of Student (Career

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Abstract - In recent years, predictive analytics has seen a surge in popularity, with many organizations using it to make decisions about everything from product development to marketing campaigns. The education sector is no exception, with many schools and universities using predictive analytics to identify at-risk students and improve retention rates. This survey paper reviews state of art in predictive analytics for student grades and career outcomes. The survey begins by discussing the different data types that can be used for predictive modeling, including demographic data, academic performance data, and social media data. Then this article reviews a few techniques used for predictive modeling in the education domain, including logistic regression, decision trees, and neural networks. Finally, this article discusses some of the challenges associated with predictive analytics in education and suggests future directions for research.

Key Words: student grade, career, machine learning, survey, svm, knn, j48, naïve bayes, linear regression, random forest, gradient boosting technique, xg boost, bayesian ridge regression

1. INTRODUCTION

In recent years, predictive analytics has become an increasingly popular tool for educators, administrators, and policymakers to use to make data-driven decisions about students' grades and careers. Predictive analytics is data mining that uses statistical techniques to predict future events or outcomes. In education, predictive analytics has been used to forecast everything from student retention and success rates to job placement and earnings. Various techniques can be used for predictive analytics, and the choice of method depends on the type of data available and the specific question being asked. Some standard methods include regression analysis, decision trees, and artificial neural networks. This survey paper will review the literature on predictive analytics in education, focusing on techniques for predicting student grades and career outcomes. We will first provide an overview of the history and applications of predictive analytics in education. Next, we will discuss some of the most used methods for predictive analytics. Finally, we will discuss some challenges and limitations of predictive analytics in education.

2. LITERATURE SURVEY

- [1] Siti Dianah Abdul Bujang, Ali Selamat, Roliana Ibrahim, Ondrej Krejcar, Enrique Herrera-viedma, Hamido Fujita, And Nor Azura Md. Ghani (2021): In this article, the authors propose a multiclass prediction model with six predictive models to predict final students' grades. The model is based on the previous students' final examination results of the first-semester course. The article does a comparative analysis of combining oversampling SMOTE with different FS methods to evaluate the performance accuracy of student grade prediction.
- [2] Arati Yashwant Amrale, Namrata Deepak Pawshe, Nikita Balu Sartape, Prof. Komal S. Munde (2022): This article proposes a counseling system that uses artificial intelligence to help with career guidance.
- [3] Vidyapriya.C, Vishhnuvardhan.R.C: In this article, the authors trained and tested three algorithms: logistic regression, Naive Bayes, and Support Vector Machine. They found that logistic regression had the highest accuracy compared to the other two algorithms.
- [4] Prathamesh Gavhane, Dhanraj Shinde, Ashwini Lomte, Naveen Nattuva, Shital Mandhane (2021): In this article, authors have analyzed most machine learning algorithms for student career prediction. They found that combining new hybrid algorithms like SvmAda, RfcAda and SvmRfc showed excellent results.
- [5] N. Vidyashreeram, Dr. A. Muthukumaravel: In this article, authors have used machine learning approaches such as Adaboost, SVN, RF, and DT to predict students' careers and have found that RF produces the best results in terms of accuracy.
- [6] Zafar Iqbal, Junaid Qadir, Adnan Noor Mian, And Faisal Kamiran: In this article, authors have discussed the use

IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (LIARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 3, Issue 13, May 2023



Principal

Predictive Analysis of Student Grades and Caleron System

Sagar More¹, Pravin Bhagwat², Indrajeet Karande³, Sayaji Dhandge⁴, Sachin Shinde⁵

Students, Department of Computer Engineering^{1,2,3,4} Assistant Professor, Department of Computer Engineering⁵ PDEA's College of Engineering, Pune, Maharashtra, India

Abstract: A data-driven strategy called Predictive Analysis of Student Grades and Career System aims to improve academic success for students and support wise career choices. This approach makes use of past academic performance data, as well as other important variables, to produce insights and forecasts about each student's performance and possible career trajectories. The technology delivers important insights into factors influencing student progress, detects at-risk individuals, and provides individualized support by utilizing cutting-edge algorithms and statistical models.

Data gathering, preprocessing, feature selection, model development, and training are only a few of the system's crucial parts. It makes use of a variety of data sources, including academic transcripts, test scores, extracurricular involvement, and surveys of career interests. The system makes sure that the supplied data is relevant and of high quality to enable precise predictions through thorough feature engineering and data pretreatment.

Based on the unique properties of the dataset, the model-building process entails choosing the most suitable prediction models, such as decision trees, random forests, logistic regression, or neural networks. The internal parameters of these models are adjusted during the training process using past data to reduce prediction error and enhance performance. Using several test datasets, the model is evaluated and validated to determine its accuracy and generalizability.

The system's implementation makes it easy for users to access it, enabling students, teachers, and policymakers to enter pertinent student data and obtain career projections. The user interface makes forecasts, insights, and suggestions in an easy-to-understand format to help students make decisions about their futures in education and employment.

A viable approach to supporting students' academic journeys and helping with career planning is provided by the Predictive Analysis of Student Grades and Career System. Through the use of data-driven methodologies, the system equips stakeholders to take well-informed decisions, allocate resources efficiently, and create focused interventions that eventually enhance educational results and enable students to realize their full potential.

Keywords: naive bayes, linear regression, random forest, gradient boosting approach, xg boost, bayesian ridge regression, survey, svm, knn, j48, and student grade, career

I. INTRODUCTION

Predictive analytics has grown in popularity as a tool for educators, managers, and legislators to employ when making data-driven decisions about students' grades and careers in recent years. Data mining that use statistical methods to forecast upcoming events or results is known as predictive analytics. Predictive analytics have been employed in the field of education to estimate everything from student retention and success rates to job placement and pay. Predictive analytics uses a variety of methodologies, and the strategy selected relies on the type of data at hand and the particular query being posed. Regression analysis, decision trees, and artificial neural networks are a few examples of conventional techniques. The literature on predictive analytics in education will be reviewed in this survey article, with an emphasis on methods for forecasting student grades and career outcomes. We will start by giving a general review of the development

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Plant Leaf Disease Detection Using Deep Learning

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Abstract - Pests damage plants and crops, which has an impact on the nation's agricultural output. Typically, farmers or professionals use their own eyes to monitor the plants to look for disease and identify it. However, this approach could be timeconsuming, expensive, and unreliable. Results from automatic detection employing image processing methods are quick and precise. In this study, deep convolutional networks are used to develop a novel method of classifying leaf images in order to recognise plant diseases. The technique of precise plant protection has the potential to grow and improve, and computer vision advancements have the potential to boost the market for applications in precision agriculture. Innovative training methods and the methodology employed make it simple and quick to implement the system in real-world settings. The deep convolutional neural network used in this method paper has been trained and fine-tuned to fit accurately to a database of plant leaves that was gathered independently for various plant illnesses. The innovation and advancement of the proposed model lay in its simplicity; by utilising deep CNN, the model can discriminate between ill and healthy leaves as well as between them and the environment. Healthy leaves and backdrop images are also in line with other classes.

Index Terms - deep convolutional neural networks, classification, training.

I. INTRODUCTION

Agriculture is one of India's key economic sectors. The Indian agricultural sector employs about 60% of the labour force of the nation. The largest producer of pulses, rice, wheat, spices, and spice-related items is believed to be India. The quality of the items that farmers produce, which is mostly dependent on the plant, determines how successful their businesses are. Plants are quite susceptible to illnesses that stunt their growth, which in turn has an impact on the farmer's environment. Use of automatic disease detection techniques is beneficial for spotting plant diseases at their earliest stages. In some sections of a plant, such as the leaves, the symptoms of plant diseases are obvious. It is laborious to manually diagnose plant illness using photographs of the leaves. Therefore, it is necessary to create computer techniques that would automate the disease identification and categorization procedure using leaf images.

Viral, fungal, and bacterial illnesses including Alternaria, Anthracnose, bacterial spot, canker, etc. are the principal diseases that affect plants. The bacterial disease is caused by the presence of germs in leaves or plants, the viral disease is caused by environmental changes, and the fungus disease is caused by the presence of fungus in the leaf. The process of segmentation is based on various aspects of an image, such as colour orientation, texture, borders, etc. Image segmentation is the process of dividing a picture into various parts. In this study, a Gradient Boosting Algorithm is used to segment leaves. When image processing is used for automatic illness identification, less work is required, costs are low, and on the plus side, it takes less time and is more accurate. In order to detect and identify plant diseases at an early stage and improve product quality, this study examines the significance of image processing techniques.

A. Motivation

The main motivation for producing this project is that, while every section of the world is developing, there is no such huge achievement or development in plant leaf diseases. So if we can prioritise this leaf field and detect infections, it will be useful to them.

B. Problem Statement

Veggies are very vulnerable to plant-impairing illnesses development that affects farmers' livelihoods ecology. Utilizing an automated illness detection system method is useful for finding plants early stages of illness Plant ailments appear themselves throughout the plant, including the leaves. The process of manually diagnosing takes a while utilising images of leaves to diagnose plant illness. The result is Development of computational algorithms is necessary to automate the disease identification procedure, and classifying with the aid of leaf photos.

II. RELATED WORKS

The ResNets algorithm was the focus of this paper. A component of the artificial neural network is a residual neural network (ResNet) (ANN). The vanishing/exploding gradient

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ISSN: 2349-5162 | ESTD Year : 2014 | Monthly Issue JOURNAL OF EMERGING TECHNOLOGIES AND **INNOVATIVE RESEARCH (JETIR)**

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Fake News Detection Using Machine Learning Literature Review

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Computer Engineering,



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PDEA's College of Engineering Manjari, Pune, India.

Abstract- Most smart phone users choosesocial media over the internet to read the news. The news is published on news websites, which also serve as an official source. How can the news and articles that are shared on social media platforms like WhatsApp groups, Facebook Pages, Twitter, and other microblogs and social networkingsites be verified? To take rumors seriously and present them as news is detrimental to society. Stopping rumors is urgently needed, especially in emerging nations like India. Instead, people need to concentrate onaccurate, reliable news pieces. This essay presents a paradigm and a methodology for identifying fake news. It is attempted to aggregate the news with the use of machine learning and natural language processing, and then afterwards decide whether the news is true or fraudulent using SupportVector Machine. The proposed model'soutput is contrasted with those of earliermodels. The suggested approach is effective and can accurately define whether a result isright up to 93.6% of the time.

Keywords: Fuzzy Logic, Fuzzy Inference, Machine Learning, Naive Based Classifier, News, Prediction, Recommendation, Support Vector Machine are all terms used to describe artificial intelligence (SVM).

INTRODUCTION 1.

In the modern world, anyone can publish content online. Unfortunately, fake news attracts a lot of attention online, especially through web-based networking platforms. People are misled and don't stop to think before sending such

inaccurate information to the arrangement's

farthest point. Such acts are bad for society since

they cause some rumors or hazy news to spread, which in turn makes people or a certain group of people think negatively[1]. To deal with suchactions, preventive measures must advance at thesame rate as technology. The general population is greatly impacted by broad communications, and as is customary, some persons try to take advantage of this. There are several websites that provide misleading information.

This has been a wonderful motivator for us to work on this project. Fake news detection is developed to stop the rumors that are being disseminated through the various platforms, whether it be social media or messaging platforms. This is done to stop disseminating fakenews which leads to activities like mob lynching. We frequently hear and read about mob lynchingsthat end in a person's death; fake news detection aims to identify these reports as false and put a stop to such actions, shielding society from these senseless acts of violence. [1] [3] [5] Sensor, the time for operation of railway gates isreduces which also includes the time for which the gates will remain closed. This ensures that the routinetraffic must be held for least amount of timeat the railway crossing. The paper intends to develop anautomatic railway gate control system which is reliable and secured than the existing manual systems. The paper is organized as follows. Chapter II gives information about the related workwhich is previously carried out. Chapter III deals with the system overview and its requirements. Chapter IV describes the system architecture, blockdiagram, circuit diagram and the hardwarerequirements.

Stress & Emotion Recognition Using Sentiment Analysis With Brain Signal

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Abstract-Stress, in common parlance, is the negative emotional state that arises when people feel overwhelmed by their responsibilities and cannot successfully do their daily tasks. There may be temporary benefits to stress. The negative effects of stress on health are well-documented, and they worsen with duration. Personality disorders, anxiety, and depression are all possible outcomes. The health issues stress creates can be mitigated if you have a firm grasp of how stress works in the body. One of the most reliable methods for determining human emotion and stress is through the analysis of brain signals. This signal-based or brain-wave-based technology can help diagnose a wide range of illnesses and impairments, much like EEG does. Emotion and mental strain can be detected using sentiment analysis. Therefore, a reliable, accurate, and precise system is essential. The purpose of this research is to create a more precise and reliable system for detecting stress in real time utilizing Electroencephalography (EEG) data. The human brain's electrical activity (EEG) can be used as a reliable, noninvasive stress gauge.

Keywords—EEG Signal, Stress, Emotion, Sentiment analysis.

I. INTRODUCTION

This According to findings from the field of psychological science, the feelings of pressure and strain collectively make up the category known as stress. Even a moderate level of stress can sometimes even be helpful. An unhealthy amount of stress can increase the risk of cardiovascular disease, high blood pressure, stroke, heart attack, and other health complications. Furthermore, it has an impact on mental health issues such as anxiety, depression, and personality disorders. Stress can be assessed in a variety of ways, including mental, physiological, emotional, and physical activities [1]. The diagnosis of stress by EEG signal analysis combined with sentiment interpretation [2] is a useful medical diagnostic tool that is used in physiological monitoring. The human brain is the most important structure in the body and is made up of billions of neurons that are all connected to each other. The electroencephalogram (EEG) and sentiment analysis are two methods that are utilized in the computation of how these neurons relate brain activity to physiological processes. In order to successfully deploy brain-computer interaction systems [3, 4], it is necessary to have a higher level of specialized competence in the field of brain-computer interaction, as determined by an examination of past work. "sad," "fear," "happy," and "calm" are some of the categories that can be used to classify emotions for the purpose of determining levels of stress [5]. In addition, the perspectives of different other researchers have been investigated. Numerous research have looked at EEG signals by employing a wide variety of machine learning and deep learning approaches [6, 7]. The goal of these studies was to determine the characteristics that are used to classify emotions. EEG data are applied to ascertain the quantity of human stress by monitoring the activity of the cerebral cortex with the assistance of a variety of feature extraction [8] and

classification algorithms. As a result of the many studies that have been conducted, we are aware that there are gaps in the study that need to be filled in order to eliminate some undesirable conditions.

Future applications of the BCI, such as illness analysis in medicine, human behavior in psychology, mental confusion in neuroscience, and humanism, will all be built on reliable recognition of sentiment and emotion [9].

II. RELATED WORK

Due in large part to the investigations that were carried out by a large number of researchers from all over the world, a significant amount of research has been done on the subject of the classification of emotions based on the activity of the human brain [13]. Although these earlier studies offer helpful information on the factors that are most influential on human stress, the framework that is currently used to understand human stress can only accommodate a partial answer to each of the questions that they raise. This work draws attention to the remarkable contributions made by researchers working in the present time period to the field of EEG signal processing technologies [14], while also drawing attention to the techniques that are related to this field. In order to acquire brain impulses, process those impulses, and then transform those processed impulses into signals that can be recognized by other devices, a BCI is absolutely necessary. [15] The taskswitching method is useful for determining whether or not a person is experiencing stress because of the negative effects it has on the activity of their brain. [16] In every country, there are people who struggle with stress. People all over the world deal with stress on a regular basis as a result of issues related to their jobs, including frustrations, disappointments, difficult working conditions, and other similar factors. [10]. Most of the causes of stress in the world can be traced back to some aspect of one's working life. Based on the relapsing model of assessment, Figure 1 depicts the evaluation and analysis of stress in each country, as well as how stress management improves the nation's economic standing. When viewed from the perspective of the mainland of India, a sizeable portion of the working population suffers from a variety of stress-related conditions. [11].



Fig. 1. Approach Selection Motivational Graph



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Early Phase Identification and Detection for Plant Poor Growth in Rural Areas: A Survey of the State of the Art



Prasad Chaudhari, Ritesh V. Patil, and Parikshit N. Mahalle

Abstract The food industry fuels the agricultural economies of Indian states. India has always been the largest manufacturing country, dominated by agriculture. Cereals, fruits, and vegetables such as potatoes, oranges, tomatoes, sugar cane, other cereals, and cotton are the most important crops in India. Maharashtra's impressive economic growth is partly based on its diverse citrus and cotton industries. This situation has created jobs for many people and great potential for economic growth in the state. The government focused on disease control, labor costs, and global markets to keep the citrus and cotton industries thriving. Recently, citrus canker, lime green, and black spotted cotton have seriously threatened citrus trees in Maharashtra. These diseases cause tree dieback and death, reduced yields, and loss of marketability. Likewise, farmers worry about the cost of tree loss, exploration, and chemicals used to control the disease. Automated detection systems can help prevent and reduce significant losses to industry, farmers, and the country's economy. This study aims to detect these diseases in crops using pattern recognition methods. The recognition method comprises three main subsystems: image acquisition, processing, and pattern recognition. The images are pre-processed to eliminate any unwanted noise, then the sheets' boundaries are identified, and finally, any relevant features are extracted. Different culture conditions were utilized using pattern recognition techniques to categorize the samples. To evaluate the classification method, we compared the results of different classification methods for detecting diseases in fruits, vegetables, and cereals, achieving an accuracy of 90-95%.

Keywords Plant diseases · Deep learning · CNN architectures

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© The Author(s), under exclusive license to Springer Nature Singapore Pte Ltd. 2023 J. Choudrie et al. (eds.), *IOT with Smart Systems*, Lecture Notes in Networks and Systems 720, https://doi.org/10.1007/978-981-99-3761-5_4

Smart Electricity Billing Management System Using Artificial Intelligent Based for the Implementation of Pre and Post Paid Tariffs

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Abstract— Electricity is an essential source of energy in human life. Every technology in modern life, from equipment to wrist watches, is powered by electricity. It is the most fundamental necessity, after food, shelter, and clothes. Many developments have occurred in power departments during the last decade, but they still use a manual billing system. A smart utility community management framework is presented in this research. Customers now need frameworks having automation and strong security since innovation has reached a certain stage. The paid-ahead-of-time meter is essential in assisting the customer in understanding their energy consumption, alleviating difficulties faced by the utility staff in reading the normal meter, and eradicating errors in bill issuance. These concerns relate to updating an existing regular energy meter that is connected to a security system and paid-in-advance framework. A Device 3B+, a traditional energy meter, a GSM device, a current measurement device, and a hand-off are all included in the stated paid-ahead meter. The two aspects of the proposed proposal are GSM innovation and overcurrent security. GSM technology is used for both transmission and storage functions.

Keywords: - Artificial Intelligence, Billing Management System, GSM Technology, Prepaid & Postnaid Tariffs Smart Energy Meter.

I. INTRODUCTION

The smart grid uses advanced commincluding intelligent technologies to impl



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and evaluate performance of the electrical energy network. Among the most significant and amazing growth factors is electricity. Nowadays, having power is a necessary component of being a man [1]. A tool used to determine how much electricity is utilized by a residential, commercial, or other electrically powered item is called an energy meter. The development of energy meter technology has advanced significantly since a few years ago. The vitality meter's accuracy and movement have substantially improved in recent years. There have been a number of innovations that have decreased the size and mass of the conventional powerful magnetic body and coil big electromechanical vitality meter in addition to advancements in usability and description. The way electrical factors are calculated has undergone a complete revolution with the development of sophisticated electronic energy meters throughout the last century. The accuracy, determination, voltage performance, smooth settling, and reading capabilities of a numerical energy meter are greater [2]. An analogue vitality meter's drawback is that since it only monitors control in one coordinate, it cannot be thoroughly studied.

Recently, a sensible gauge has been shown in the advertisement. A critical meter is often a microelectronic meter with a microcontroller inserted that can record energy usage in less than an hour and report it back to the reseller for

> arging on a particular day. Businesses and inefit enormously from clever meters in y, competence, and comfort. Customers eters may see the information the meter to see how much electricity is being used.

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Hybrid Algorithms based Software Development System using Artificial Intelligence for the Business Development

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Abstract— In this essay, we look at how to provide a product to a consumer as quickly as possible without compromising its quality. We'll show how putting six continuous architectural principles into practise will help us ensure the quality of the finished project while shortening the manufacturing cycle. Prior to reducing costs, it's important to provide the things as fast as feasible. We can do this by using a variety of strategies, such availability plans, that enable us to maintain the greatest levels of quality, just as the software team was able to. He talks about these approaches, as well as a few more, for delivering top-notch printer software designs quickly. India has a big food-related industry. principal means of support. In this essay, I want to look at how to provide items to customers as quickly as possible without sacrificing product quality. Even while making enhancements, we will consider how the six comparable design components may ensure that the finished product has the highest possible quality in the shortest period of time possible. Giving excellent goods quickly and doing them effectively are both essential. To do this, we may use a range of strategies, such as unavailability techniques, which enable us to maintain the highest level of accuracy that our team of engineers is capable of. He discusses these methods and a few options for the goods' distribution. Using this stock market idea, growers can sell their goods at the highest bidder pricing. Farmers that fill out this form may register themselves and have access to a variety of facilities, such as market alerts, merchant engagement, assessments, and more. The creation of knowledge devices, automated weapon systems,[1] language comprehension, computer vision, legal analysis, and agricultural monitoring are just a few examples of the many uses for data modelling. The problem of the expanding global agricultural output will be addressed by the employment of AI in contemporary agriculture. Based on AI, it should be easy to recognise and quickly identify plants, and judgments on the appropriate chemical to apply and the necessary safe zone might be made quickly. The majority of residents in this area rely on agricultural products for the majority of their income, which is good for the whole neighbourhood. Farmers are in responsible of growing the food that is required for a healthy lifestyle. Choosing the right market value for the shares they are providing is a challenge for the sales reps. The costs of this

corporation considerably outweigh its profits previously mentioned concept of share pripermitted to offer their goods at the highest k extra services available to farmers who join assessments, supplier relationships, market up

other advantages and features of a similar kind. Data analytics has several applications, including as a tool of knowledge.

Keywords: AI, Business Development, Hybrid Algorithm, OOSE, Neural Network, CNN and XBLR.

I. INTRODUCTION

Prototypes are one of the life cycle pattern kinds for software development that are most often utilised. Many businesses that make software use the testing approach. The progressive model is often the order of steps utilised [2] when a customer submits a large-scale programme with the intention of completing it rapidly. The evolved life cycle approach is favoured over other life cycle methods because it enables us to continually develop the system given to the client while maintaining the basic minimums, or, to put it another way, the essential qualities of the product. For the application developers and the company, it is very problematic when the customer is unsure of his requirements and continuously altering them over time.

The life-cycle model is also employed well in modelling inside the software development business. Companies and organisations that create software often use prototyping. When a customer requests a speedy turnaround on a significant project, the up is often employed in connection with the life cycle idea. The transformational model [3] was chosen above other available models because it only includes the most basic elements, which we should really refer to as the item's essential components, and enables us to continue working on the building even after it has been delivered to the customer. When the consumer is unsure about their wants and often changes them, the programmers and the company face significant challenges. There will be a significant investment of resources, including time, energy, and labour. They should easily be able to introduce new items using OOSE since the new variables will absorb the key characteristics of the existing ones. Although the courses with either a solid item are restricted to carrying out their particular designated goal,

o apply such elements in the construction of Device agile development (Central Board of tion) is useful in this situation. It enables us mputer system using the stock components. tive [4] is to build the system using preents and integrating them rather than

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ISBN: 978-93-95

SOFT COMPUTING (BE COMPUTER) First Edition : February 2023

: February : Authors

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Lecture Notes on Data Engineering and Communications Technologies 131

G. Rajakumar Ke-Lin Du Chandrasekar Vuppalapati Grigorios N. Beligiannis *Editors*

Intelligent Communication Technologies and Virtual Mobile Networks

Proceedings of ICICV 2022



Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307.

Springer

Classification of ECG Signal for Cardiac Arrhythmia Detection Using GAN Method



S. T. Sanamdikar, N. M. Karajanagi, K. H. Kowdiki, and S. B. Kamble

Abstract Today, a big number of people suffer from various cardiac problems all over the world. As a result, knowing how the ECG signal works is critical for recognising a number of heart diseases. The electrocardiogram (ECG) is a test that determines the electrical strength of the heart. In an ECG signal, PQRST waves are a group of waves that make up a cardiac cycle. The amplitude and time intervals of PORST waves are determined for the learning of ECG signals in the attribute removal of ECG signals. The amplitudes and time intervals of the PQRST segment can be used to determine the appropriate operation of the human heart. The majority of approaches and studies for analysing the ECG signal have been created in recent years. Wavelet transform, support vector machines, genetic algorithm, artificial neural networks, fuzzy logic methods and other principal component analysis are used in the majority of the systems. In this paper, the methodologies of support vector regression, kernel principal component analysis, general sparse neural network and generative adversarial network are compared. The GAN method outperforms both of the other methods. However, each of the tactics and strategies listed above has its own set of benefits and drawbacks. MATLAB software was used to create the proposed system. The proposed technique is demonstrated in this study with the use of the MIT-BIH arrhythmia record, which was used to manually annotate and establish validation.

Keywords Artificial neural networks · Support vector regression · Kernel principal component analysis · General sparse neural network · Generative adversarial network

S. T. Sanamdikar (🖂)

N. M. Karajanagi · K. H. Instrumentation Departme Pune, India

S. B. Kamble Electronics Department, I

esearch Awasari Khurd,

, India

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Pte Ltd. 2023 257 Virtual Mobile hnologies 131,

Instrumentation Department, PDEA's College of Engineering, Manjari, Pune, India e-mail: sanjay.coem@gmail.com

Lecture Notes in Networks and Systems 444

I. Jeena Jacob Selvanayaki Kolandapalayam Shanmugam Robert Bestak *Editors*

Expert Clouds and Applications Proceedings of ICOECA 2022



Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307.

<u>)</u> Springer

Categorization of Cardiac Arrhythmia from ECG Waveform by Using Super Vector Regression Method



S. T. Sanamdikar, N. M. Karajanagi, K. H. Kowdiki, and S. B. Kamble

Abstract Various heart disorders affect a large number of people around the world today. As a result, understanding the properties of the ECG waveform is crucial to identify a variety of heart conditions. The ECG is an investigation that determines the strength of the electric impulses of heart. PQRST waves are a collection of waves that make up a cardiac cycle in an ECG waveform. The magnitude and temporal periods of PQRST impulses are estimated for the learning of ECG waveforms in the attribute removal of ECG waveforms. The values of the PQRST segment's amplitudes and time intervals can be utilized to determine the proper operation of the human heart. In recent years, the bulk of methodologies and studies for analysing the ECG waveform have been developed. In the bulk of the systems, fuzzy logic methods, artificial neural networks, genetic algorithm, support vector machines, the wavelet transform and other waveform examining techniques are used. SVM, ANN, neural mode decomposition and support vector regression approaches are compared in this work. The ISVR approach outperforms the other two methods. Each of the methods and strategies outlined above, however, have its own set of compensation and disadvantages. In this article, the wavelet transform Db4 is utilized to extract various properties from an ECG waveform. The proposed system is designed with MATLAB software. The verification of arrhythmia is presented in this study utilising the MIT-BIH dataset, which was used to validate should be manually annotated and produced.

Keywords Cardiac arrhythmia · QRS complex · Median filter · Electrocardiograph · Wavelet transform Db4

N. M. Karajanagi · K. H. Instrumentation Departme Pune, India

S. B. Kamble Electronics Department, I



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, India

Pte Ltd. 2022 599 Networks and

S. T. Sanamdikar (🖂)

Instrumentation Department, PDEA's College of Engineering, Manjari, Pune, India e-mail: sanjay.coem@gmail.com









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Tikaram Jagannath Arts, Commerce & Science College Khadki, Pune. And

Jointly Organized One Day Workshop

Effective Implementation of NEP 2020

Certificate

One Day Workshop on "Effective Implementation of NEP 2020" held on Friday, 24th February 2023 of PDEA'S College of Engineering Manjani This is to certify that Mr./Mrs./Dr./Prof. Vaishali Shantanam Hiwarale .Bk has actively participated in

Rajendira Lelle

Mr. Rajendrra Lelle Coordinator, IQAC Tikaram Jagannath College

Dr. Sanjay Chakane Principal

Tikaram Jagannath College

Dr. Sanjay Dhole

Chairman, IQAC Savitribai Phule Pune University

Hung Commence of College

PDEA COLLEGE OF ENGINEERING MANJARI BK. PUNE

National Service Scheme(NSS)

Activity 1

Activity Name:-Eye Checkup Activity

Organised By:-All NSS volunteers.

Date: 17 Aug 2022

Place:-PDEA's Collage Of Engineering Manjari BK Pune

Photo:-





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Activity Name:-Guest Lecture on Competitive Exams...

Guest Name:- 1)Dr.Sudhir Khedkar (Depoti Commisonar,Pune)

Date:-17 SEP 2022

Place:- Seminar Hall, PDEA, s College of engineering, Manjari Bk, Pune.







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Activity Name:-Book Exihibition...

Organised By:-All NSS Core Team

Date:- 08 Oct 2022

Place:- PDEA,s College of engineering, Manjari Bk, Pune.





Principal Pune District Education Association's College of Engineering Manjari (9k.), Pune - 412307.



Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307.

Activity Name:-Constitution Day celebration...

Organised By:-All NSS Core Team

Date:-26 Nov 2022

Place:- PDEA,s College of engineering, Manjari Bk, Pune.





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Activity Name:-Plastic collection at Dive Ghat...

Organised By:-All NSS volunteers.

Date:-27 Nov 2022

Place:- Dive Ghat, Saswad.

Photo:-



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Principal Pune District Education Association's College of Engineering Manjar (9k.), Pune - 412307.





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Activity Name: - Blood Donation Camp

Organised By:-All NSS volunteers.

Date: 12 Dec 2022

Place: PDEA's Collage Of Engineering Manjari BK Pune

Photo:-



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Activity Name:- Dental checkup Activity

Organised By:-All NSS volunteers.

Date:-17 Dec 2022

Place: PDEA's Collage Of Engineering Manjari BK Pune







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Activity Name: - Mula River Cleaning...

Organised By:-All NSS volunteers.

Date: 2 Jan 2023

Place:- Mula River,Z Bridge,Pune

Photo:-





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Activity Name: - Blanket Providing to Needed People

Organised By:-All NSS volunteers.

Date: 16 Jan 2023

Place:-All Pune City





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Principal Pune District Education Association's College of Engineering Manjari (9k.), Pune - 412307.

Activity Name: - National Voter Day Celebration

Organised By:-All NSS volunteers.

Date: 25 Jan 2023

Place: PDEA's Collage Of Engineering Manjari BK Pune









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Activity Name: - Fire less cooking Competition

Organised By:-All NSS volunteers.

Date: 1 Feb 2023

Place: PDEA's Collage Of Engineering Manjari BK Pune







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Activity 12

Activity Name: - Art of living Eduyouth Program

Organised By:-All NSS volunteers.

Date: 4 Feb 2023

Place: Suryakant kakade farm kothrud, Pune

Photo:-





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Pune - 412 307





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Objectives :

- The objective of CE is to help students to enhance key life skills like communication, organization, and leadership
- 2. Enable free and critical thinking in the minds of the future citizens through education in speech and debate.
- 3. Be the incubator and enabler to help students enhance key life skills like communication, critical thinking, civic awareness, and leadership beyond the academic curriculum.

Education Association's



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2	Sneha Satpute	SE	Computer Engg.	В
3	Soniya Dound	SE	Computer Engg.	А
4	Sakshi Jadhav	SE	Computer Engg.	А
5	Ashwini Ugale	SE	Computer Engg.	В
6	Tejal Hinge	SE	Computer Engg.	А
7	Trupti Belote	SE	Computer Engg.	А
8	Shweta Jagtap	SE	Computer Engg.	А
9	Vrushali Kudande	SE	Computer Engg.	А
10	Monika Aher	SE	Computer Engg.	Α
11	Sakshi Shelar	SE	Computer Engg.	В
12	Rutuja Kolte	SE	Computer Engg.	А
13	Vaishnavi Kutwal	SE	Computer Engg.	А
14	Ashutosh Kohinkar	SE	Computer Engg.	Α
15	Akash Jadhav	SE	Computer Engg.	А
16	Eknath Borate	SE	Computer Engg.	А
17	Tanmay Gawali	SE	Computer Engg.	А
18	Sai Darawade	SE	Computer Engg.	А
19	Sanket Bharawade	SE	Computer Engg.	А
20	Sourabh Bagade	SE	Computer Engg.	А
21	Aniket Jawalgekar	SE	Computer Engg.	А
22	Om Galande	SE	Computer Engg.	В





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Week 1 Worksheet: Finding a Topic, and Creating an Intro

<u>Directions</u>: Students, please make a copy of this document by converting it into a google document or Word document. Please fill it out, and send it to your teacher. This worksheet should be finished by next week's class.

Student Name: School:

×

Topic: Who is your most influential person?

Introduction Paragraph

Hook:

Connection:

Thesis Statement:

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WEEK 2: Creating the Body Paragraph (second one)

<u>Directions:</u> Students, please make a copy of this document by converting it into a google document or Word document. Please fill it out, and send it to your teacher. If your work cannot fit within the box, please feel free to write your speech on a separate paper This worksheet should be finished by next week's class. If you forgot what these words mean, please email your teacher Student Name:

School:

X

Topic:

POINT OF ANALYSIS 1		
<u>Claim:</u>		
Evidence:		
Analysis		

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WEEK 3: Creating the Body Paragraph (second one and third one)

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If you forgot what these words mean, please email your teacher

Student Name:

School:

X

Topic:

POINT OF ANALYSIS	2		
<u>Claim:</u>		 	
Evidence:			
Analysis			

POINT OF ANALYSIS 3

<u>Claim:</u>

Evidence:

Analysis

PA



WEEK 4: Creating the Conclusion Paragraph

<u>Directions</u>: Students, please make a copy of this document by converting it into a google document or Word document. Please fill it out, and send it to your teacher. If your work cannot fit within the box, please feel free to write your speech on a separate paper This worksheet should be finished by next week's class. If you forgot what these words mean, please email your teacher

Student Name:

School:

3%

Topic:

Conclusion

Reframing the Thesis Statement

Connection Back to Hook



Through his curiosity, Isaac Newton emphasized and encouraged learning and expanding knowledge. Newton once said "what we know is a drop, what we don't know is an ocean." Newton clearly emphasized and believed that there is so much more to learn and know about in the world and what we know is merely the surface level. Because so many people – children and adults alike – looked up to Newton's work, he has and will continue to encourage society to learn more about and explore the world, further helping better and develop our society.

Through his great and revolutionary discoveries, Isaac Newton taught the world to continue exploring and help influence a more developed society. Today, scientists are able to use the ideas and discoveries of Newton to better understand how our world works. For example, thanks to Newton's finding of the principle of gravity and his development of the universal law of gravitation, scientists are able to have a better understanding of gravity and how it works. Scientists can then use this understanding to develop new theories or discoveries and help society learn a bit more about how things work around us to find more efficient ways to do certain tasks. Without Newton's discoveries, we would not even be able to know surface level information about so many parts of our world and in turn, would not be able to progress and better society.

Overall, Newton has shown the importance of curiosity, encouraged the world to learn and expand our knowledge, and use this newfound knowledge to explore the world and develop a better society, hence making him the most influential person. As Newton has successfully influenced many people around the world, hopefully we can build enough bridges for all the walls we have built and started to build.

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WEEK 3 ANALYSES REFERENCE SHEET

2

Writing an analysis can be tough, so here are some ways to do it!				
Method	Explanation			
Generalization	If something is true for a small group, it might also be true for a bigger group			
Sign/Clue	One piece of evidence signals a specific condition or idea			
Causality	One event or state can cause another- basically a cause and effect relationship			
Authority	Think about whether the author is reliable and if they are a professional. This can also be used as an analysis.			
Principle	Build on both your moral values and the moral values of the audience			
Analogy	Compare one situation, idea, or event to another © Cognitive Evchange			

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Introducing Deokule Sir to College of Engineering, Manjari ; Cognitive Exchange Batch Icebreaking Session Of Mr. Deokule Sir on COEM Cognitive Exchange students Batch O G

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Interactive Activity of Self Introduction & Self Confidence conducted in session Cognitive Exchange Batch students attending f En Introductory Session

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Final Assessment on Basic Speech Billege

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17

Winners Of Final Assessment -1st Rank - Sakshi Jadhav. 2nd Rank - Aniket Jawalgekar. 3rd Rank - Vrushali Kudande.

Task - Preparation and Delivery of Speech on Favourite / Inspiring Quote

18

Total Batch of 22 Students Have Successfully Completed First Stage of Assessment on Basic Speech

Pune Distr n Association's College of Engineering, Manjari (Bk.) Pune - 412307.

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for successfully completing the CognitivExchange Basic Speech Program

December 16, 2022

Folsom CA, USA



Jyoti Das Chairman of Board

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		Vrushali Kudand	le			
	for successfully completing the CognitivExchange Basic Speech Program					
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C course content

Basics content of C Language

- What is C language
- History of C Language
- Features of C Language
- ➢ How to Install C
- The Structure of a C Program
- How to Write C Programs?
- Compilation process in C
- Printf() and scanf() in C
- ↓ Clanguage Overview
- Veriables in C and Its Types
- Data Types in C
- Claguage Keywods
- Identifiers in C and their type
- Role of operater in C language
- Comments in C and their Types
- Format Specifier in C language
- Esacape sequence
- > (ASCII) American Standard Code for information interchange values in C
- Role of a constraints in C
- > The Types of Literals that exist in C programs
- Importance of Tokens in C
- Boolean Data Type in C
- Static keyword in C
- Role of programming errors in C and their types
- Role of compile time and run time error in C
- Conditional operater in C language

Acidal

Bitwise operater in C and their types

on Association's Training & District Placement Office Pune - 412 30

✤ Control Statements Which Used C Language:

- > The IF.....ELSE Statement in C and variants of if statement in C language
- IF.....ELSE ladder (C switch statement)
- The difference between If ...else and switch statement
- Loops in C programming and their three types
- ➢ Do while loop in C
- While loop in C (pre-tested loop)
- For loop in C Language
- Nested loop in C language
- Infinite loop in C language
- Role of C break statement
- C continue statement
- goto statement in c
- type casting in c
- 🖌 Function in C
 - Advantages of C Function and their Types
 - Call by value method in C and call by reference method in C
 - Recursion process in C
 - Storage classes in C and their Four types

Array in C

- Array: what and why?
- > 1D arrays
- > 2Darrays
- Mulri Dimentional array
- Dynamic arrays

🖌 Pointers in C

- Pointers in C and declaring a pointer
- Double pointer in C
- Dangling pointer in C
- Sizeof() operater in c
- Constraint pointer in c and their syntax
- Void pointer in c
- > Dereference pointer (indirection operator) in C and why we use

Dynamic memory in C

- The concept of dynamic memory allocation in c language and their 4 types of functions
- 🔸 String Handling in C
- gets() puts() function in C
- Role of string function
- String Length: strlen function in C language
- The strcpy function
- String concatenation: strcat()
- Compare string function in cstrcmp()
- The reverse string function.....strrev()
- String lowercase functionstrlwr()
- String uppercase function...strupr()
- String strstr()
- Match function in C

The Structures and union in C

- Advantages of a structure in c
- Defining structuretypedef keyword in C
- Uses of an array structures in c
- Nested structure in C
- Structure padding in c
- Defining union datatype in c



 File Management in C

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- Introduction of file management and need of file handling in C
- Fprintf() and fscanf() function
- Writing file fputs() function and reading file fgets() function
- fseek() function in c
- rewind() function in c
- ftell() dunction in c

Dynamic Memory allocation

✓ Introduction to Dynamic Memory Allocation

✓ Malloc

✓ Calloc

✓ Realloc

✓ Free

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Basic Content of C for Embedded

- Introduction about Embedded
- Program organization and microcontroller memory
- Data types, constants, variables
- Microcontroller register/port addresses
- > Operators: arithmetic, logical, shift
- > Control structures: if, while, for
- > Functions
- Interrupt routines

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Session - 2

First C Program

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Before starting the abcd of C language, you need to learn how to write, compile and the 412 30 run the first c program.

To write the first c program, open the C console and write the following code:

- 1. #include <stdio.h>
- 2. int main(){
- printf("Hello C Language");
- 4. return 0;
- 5. }

#include <**stdio.h**> includes the **standard input output** library functions. The printf() function is defined in stdio.h .

int main() The main() function is the entry point of every program in c language.

printf() The printf() function is used to print data on the console.

return 0 The return 0 statement, returns execution status to the OS. The 0 value is used for successful execution and 1 for unsuccessful execution.

How to compile and run the c program

There are 2 ways to compile and run the c program, by menu and by shortcut.

By menu

Now click on the compile menu then compile sub menu to compile the c program.

Then click on the run menu then run sub menu to run the c program.

By shortcut

Or, press ctrl+f9 keys compile and run the program directly.

You will see the following output on user screen.

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You can view the user screen any time by pressing the **alt+f5** keys.

Now **press Esc** to return to the turbo c++ console.

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Compilation process in c

What is a compilation?

The compilation is a process of converting the source code into object code. It is done with the help of the compiler. The compiler checks the source code for the syntactical or structural errors, and if the source code is error-free, then it generates the object code.

#include<stdio.h> 01000000000000 main() 01111111111111111 01010101101010 printf("Hello javaTpoint"); 00000011111111 return 0; 00000111111111 00000010101011 } Pune Discict Education Association's College of Engineering, Manjari (Bk.),

The c compilation process converts the source code taken as input into the object code or machine code. The compilation process can be divided into four steps, i.e., Pre-processing, Compiling, Assembling, and Linking.

The preprocessor takes the source code as an input, and it removes all the comments from the source code. The preprocessor takes the preprocessor directive and interprets it. For example, if **<stdio.h>**, the directive is available in the program, then the preprocessor interprets the directive and replace this directive with the content of the **'stdio.h'** file.

The following are the phases through which our program passes before being transformed into an executable form:

- Preprocessor
- Compiler
- Assembler
- Linker





Preprocessor

The source code is the code which is written in a text editor and the source code file is given an extension ".c". This source code is first passed to the preprocessor, and then the preprocessor expands this code. After expanding the code, the expanded code is passed to the compiler.

Compiler

The code which is expanded by the preprocessor is passed to the compiler. The compiler converts this code into assembly code. Or we can say that the C compiler set the pre-processed code into assembly code.

Assembler

The assembly code is converted into object code by using an assembler. The name *Aure-412301 of the object file generated by the assembler is the same as the source file. The extension of the object file in DOS is '.obj,' and in UNIX, the extension is 'o'. If the name of the source file is **'hello.c'**, then the name of the object file would be 'hello.obj'.

Linker

Mainly, all the programs written in C use library functions. These library functions are pre-compiled, and the object code of these library files is stored with '.lib' (or '.a') extension. The main working of the linker is to combine the object code of library files with the object code of our program. Sometimes the situation arises when our program refers to the functions defined in other files; then linker plays a very important role in this. It links the object code of these files to our program. Therefore, we conclude that the job of the linker is to link the object code of our program with the object code of the library files and other files. The output of the linker is the executable file. The name of the executable file is the same as the source file but differs only in their extensions. In DOS, the extension of the executable file is '.exe', and in UNIX, the executable file can be named as 'a.out'. For example, if we are using printf() function in a program, then the linker adds its associated code in an output file.

Let's understand through an example.

hello.c

- 1. #include <stdio.h>
- 2. int main()
- 3. {
- printf("Hello javaTpoint");
- 5. return 0;
- 6. }

Now, we will create a flow diagram of the above program:

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In the above flow diagram, the following steps are taken to execute a program:

- Firstly, the input file, i.e., hello.c, is passed to the preprocessor, and the preprocessor converts the source code into expanded source code. The extension of the expanded source code would be hello.i.
- The expanded source code is passed to the compiler, and the compiler converts this expanded source code into assembly code. The extension of the assembly code would be **hello.s.**
- This assembly code is then sent to the assembler, which converts the assembly code into object code.
- After the creation of an object code, the linker creates the executable file. The loader will then load the executable file for the execution.

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CERTIFICATE — OF PARTICIPATION —

THE CERTIFICATE IS PRESENTED TO:

Siddhant Ganesh Pawar

For successfully completing 4 days training from 21st February 2023 to 24th February 2023 on "Employability Skills" under "LifeSkills" programme organized by Rubicon at Pune District Education Association's College of Engineering, Pune, Maharashtra.





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Dhanya Narayanan Chief Operating Officer



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COGNITIVE EXCHANGE COURSE

International Collaboration of PDEA' COEM.

Objectives :

- The objective of CE is to help students to enhance key life skills like communication, organization, and leadership
- 2. Enable free and critical thinking in the minds of the future citizens through education in speech and debate.
- 3. Be the incubator and enabler to help students enhance key life skills like communication, critical thinking, civic awareness, and leadership beyond the academic curriculum.



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r. No.	Name	Class	Branch	Division
1	Sayali Dighe	SE	Computer Engg.	А
2	Sneha Satpute	SE	Computer Engg.	В
3	Soniya Dound	SE	Computer Engg.	А
4	Sakshi Jadhav	SE	Computer Engg.	А
5	Ashwini Ugale	SE	Computer Engg.	В
6	Tejal Hinge	SE	Computer Engg.	А
7	Trupti Belote	SE	Computer Engg.	А
8	Shweta Jagtap	SE	Computer Engg.	А
9	Vrushali Kudande	SE	Computer Engg.	А
10	Monika Aher	SE	Computer Engg.	Α
11	Sakshi Shelar	SE	Computer Engg.	В
12	Rutuja Kolte	SE	Computer Engg.	А
13	Vaishnavi Kutwal	SE	Computer Engg.	А
14	Ashutosh Kohinkar	SE	Computer Engg.	Α
15	Akash Jadhav	SE	Computer Engg.	А
16	Eknath Borate	SE	Computer Engg.	А
17	Tanmay Gawali	SE	Computer Engg.	А
18	Sai Darawade	SE	Computer Engg.	А
19	Sanket Bharawade	SE	Computer Engg.	А
20	Sourabh Bagade	SE	Computer Engg.	А
21	Aniket Jawalgekar	SE	Computer Engg.	А
22	Om Galande	SE	Computer Engg.	В





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Week 1 Worksheet: Finding a Topic, and Creating an Intro

<u>Directions</u>: Students, please make a copy of this document by converting it into a google document or Word document. Please fill it out, and send it to your teacher. This worksheet should be finished by next week's class.

Student Name: School:

×

Topic: Who is your most influential person?

Introduction Paragraph

Hook:

Connection:

Thesis Statement:

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WEEK 2: Creating the Body Paragraph (second one)

<u>Directions:</u> Students, please make a copy of this document by converting it into a google document or Word document. Please fill it out, and send it to your teacher. If your work cannot fit within the box, please feel free to write your speech on a separate paper This worksheet should be finished by next week's class. If you forgot what these words mean, please email your teacher Student Name:

School:

X

Topic:

POINT OF ANALYSIS 1		
<u>Claim:</u>		
Evidence:		
Analysis		

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WEEK 3: Creating the Body Paragraph (second one and third one)

<u>Directions</u>: Students, please make a copy of this document by converting it into a google document or Word document. Please fill it out, and send it to your teacher. If your work cannot fit within the box, please feel free to write your speech on a separate paper This worksheet should be finished by next week's class.

If you forgot what these words mean, please email your teacher

Student Name:

School:

X

Topic:

POINT OF ANALYSIS	2		
<u>Claim:</u>		 	
Evidence:			
Analysis			

POINT OF ANALYSIS 3

<u>Claim:</u>

Evidence:

Analysis

PA



WEEK 4: Creating the Conclusion Paragraph

<u>Directions</u>: Students, please make a copy of this document by converting it into a google document or Word document. Please fill it out, and send it to your teacher. If your work cannot fit within the box, please feel free to write your speech on a separate paper This worksheet should be finished by next week's class. If you forgot what these words mean, please email your teacher

Student Name:

School:

30

Topic:

Conclusion

Reframing the Thesis Statement

Connection Back to Hook



Through his curiosity, Isaac Newton emphasized and encouraged learning and expanding knowledge. Newton once said "what we know is a drop, what we don't know is an ocean." Newton clearly emphasized and believed that there is so much more to learn and know about in the world and what we know is merely the surface level. Because so many people – children and adults alike – looked up to Newton's work, he has and will continue to encourage society to learn more about and explore the world, further helping better and develop our society.

Through his great and revolutionary discoveries, Isaac Newton taught the world to continue exploring and help influence a more developed society. Today, scientists are able to use the ideas and discoveries of Newton to better understand how our world works. For example, thanks to Newton's finding of the principle of gravity and his development of the universal law of gravitation, scientists are able to have a better understanding of gravity and how it works. Scientists can then use this understanding to develop new theories or discoveries and help society learn a bit more about how things work around us to find more efficient ways to do certain tasks. Without Newton's discoveries, we would not even be able to know surface level information about so many parts of our world and in turn, would not be able to progress and better society.

Overall, Newton has shown the importance of curiosity, encouraged the world to learn and expand our knowledge, and use this newfound knowledge to explore the world and develop a better society, hence making him the most influential person. As Newton has successfully influenced many people around the world, hopefully we can build enough bridges for all the walls we have built and started to build.

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Through his curiosity, Isaac Newton emphasized and encouraged learning and expanding knowledge. Newton once said "what we know is a drop, what we don't know is an ocean." Newton clearly emphasized and believed that there is so much more to learn and know about in the world and what we know is merely the surface level. Because so many people – children and adults alike – looked up to Newton's work, he has and will continue to encourage society to learn more about and explore the world, further helping better and develop our society.

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WEEK 3 ANALYSES REFERENCE SHEET

2

Writing an analysis can be tough, so here are some ways to do it!				
Method	Explanation			
Generalization	If something is true for a small group, it might also be true for a bigger group			
Sign/Clue	One piece of evidence signals a specific condition or idea			
Causality	One event or state can cause another- basically a cause and effect relationship			
Authority	Think about whether the author is reliable and if they are a professional. This can also be used as an analysis.			
Principle	Build on both your moral values and the moral values of the audience			
Anatogy	Compare one situation, idea, or event to another © Cognitive Evchange			

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Introducing Deokule Sir to College of Engineering, Manjari ; Cognitive Exchange Batch Icebreaking Session Of Mr. Deokule Sir on COEM Cognitive Exchange students Batch O G

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Interactive Activity of Self Introduction & Self Confidence conducted in session Cognitive Exchange Batch students attending f En Introductory Session

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Final Assessment on Basic Speech Billege

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17

Winners Of Final Assessment -1st Rank - Sakshi Jadhav. 2nd Rank - Aniket Jawalgekar. 3rd Rank - Vrushali Kudande.

Task - Preparation and Delivery of Speech on Favourite / Inspiring Quote

18

Total Batch of 22 Students Have Successfully Completed First Stage of Assessment on Basic Speech

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Certificate of Completion

This certificate is awarded to

Monika Aher

for successfully completing the CognitivExchange Basic Speech Program

December 16, 2022

Folsom CA, USA



Jyoti Das Chairman of Board

ollege of Engineering.



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COGNITIVE 💥 EXCHAN

	Certificat	te of Co	mpletion		
	This ce	rtificate is award	ded to		
Vrushali Kudande					
for successfully completing the CognitivExchange Basic Speech Program					
Training & Placement Officer	December 16, 2022 Folsom CA, USA		Jyoti Das Jyoti Das Chairman of Board		
	COGN	ITIVE 💥	EXCHAN Brincipal Pune District Education Association College of Engricering, Marine Blue Pure - 412307		

KDN Infotech Pyt. Ltd. & V and K Softtech Solution Pyt. Ltd.

Under MOU Organised



Job Oriented course "Industrial & Embedded C programming language." With one individual project.

*Objectives :-

KDN

- -Provide training & job oriented placement programs.
- -IT career guidance to help candidate to select career path. -IT Industry Awareness.
- -Course guidance for Non-IT candidates, to select the proper course and enter IT field to build their career.
- -Guidance on Aptitude Test.
- -Free Internship for Post Graduate shortlisted students.

Note:-Candidate who will crack the Apptitude after C programming course will get FREE placement calls.

Purre District Education Association's College of Engineering, Manjan (Ek.), Pune - 412307 Pune-412,007 Eligibility: BCA,BCS,MCA,MCS IT/NON IT background students.

Association

Training &

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Course Syllabus.





C course content

Basics content of C Language

- What is C language
- History of C Language
- Features of C Language
- ➢ How to Install C
- The Structure of a C Program
- How to Write C Programs?
- Compilation process in C
- Printf() and scanf() in C
- ↓ Clanguage Overview
- Veriables in C and Its Types
- Data Types in C
- Claguage Keywods
- Identifiers in C and their type
- Role of operater in C language
- Comments in C and their Types
- Format Specifier in C language
- Esacape sequence
- > (ASCII) American Standard Code for information interchange values in C
- Role of a constraints in C
- > The Types of Literals that exist in C programs
- Importance of Tokens in C
- Boolean Data Type in C
- Static keyword in C
- Role of programming errors in C and their types
- Role of compile time and run time error in C
- Conditional operater in C language

Acidal

Bitwise operater in C and their types



- ✤ Control Statements Which Used C Language:
 - > The IF.....ELSE Statement in C and variants of if statement in C language
 - IF.....ELSE ladder (C switch statement)
 - The difference between If ...else and switch statement
 - Loops in C programming and their three types
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- Uses of an array structures in c
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- Structure padding in c
- Defining union datatype in c



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- Fprintf() and fscanf() function
- Writing file fputs() function and reading file fgets() function
- fseek() function in c
- rewind() function in c
- ftell() dunction in c

Dynamic Memory allocation

✓ Introduction to Dynamic Memory Allocation

✓ Malloc

✓ Calloc

✓ Realloc

✓ Free

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Basic Content of C for Embedded

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- > Operators: arithmetic, logical, shift
- > Control structures: if, while, for
- > Functions
- Interrupt routines

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Session - 2

First C Program

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To write the first c program, open the C console and write the following code:

- 1. #include <stdio.h>
- 2. int main(){
- printf("Hello C Language");
- 4. return 0;
- 5. }

#include <**stdio.h**> includes the **standard input output** library functions. The printf() function is defined in stdio.h .

int main() The main() function is the entry point of every program in c language.

printf() The printf() function is used to print data on the console.

return 0 The return 0 statement, returns execution status to the OS. The 0 value is used for successful execution and 1 for unsuccessful execution.

How to compile and run the c program

There are 2 ways to compile and run the c program, by menu and by shortcut.

By menu

Now click on the compile menu then compile sub menu to compile the c program.

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By shortcut

Or, press ctrl+f9 keys compile and run the program directly.

You will see the following output on user screen.

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You can view the user screen any time by pressing the **alt+f5** keys.

Now **press Esc** to return to the turbo c++ console.

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Compilation process in c

What is a compilation?

The compilation is a process of converting the source code into object code. It is done with the help of the compiler. The compiler checks the source code for the syntactical or structural errors, and if the source code is error-free, then it generates the object code.

#include<stdio.h> 01000000000000 main() 01111111111111111 01010101101010 printf("Hello javaTpoint"); 00000011111111 return 0; 00000111111111 00000010101011 } Pune District Education Association's College of Engineering, Manjari (Bk.),

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The preprocessor takes the source code as an input, and it removes all the comments from the source code. The preprocessor takes the preprocessor directive and interprets it. For example, if **<stdio.h>**, the directive is available in the program, then the preprocessor interprets the directive and replace this directive with the content of the **'stdio.h'** file.

The following are the phases through which our program passes before being transformed into an executable form:

- Preprocessor
- Compiler
- Assembler
- Linker





Preprocessor

The source code is the code which is written in a text editor and the source code file is given an extension ".c". This source code is first passed to the preprocessor, and then the preprocessor expands this code. After expanding the code, the expanded code is passed to the compiler.

Compiler

The code which is expanded by the preprocessor is passed to the compiler. The compiler converts this code into assembly code. Or we can say that the C compiler set the pre-processed code into assembly code.

Assembler

The assembly code is converted into object code by using an assembler. The name *Aure-412301 of the object file generated by the assembler is the same as the source file. The extension of the object file in DOS is '.obj,' and in UNIX, the extension is 'o'. If the name of the source file is **'hello.c'**, then the name of the object file would be 'hello.obj'.

Linker

Mainly, all the programs written in C use library functions. These library functions are pre-compiled, and the object code of these library files is stored with '.lib' (or '.a') extension. The main working of the linker is to combine the object code of library files with the object code of our program. Sometimes the situation arises when our program refers to the functions defined in other files; then linker plays a very important role in this. It links the object code of these files to our program. Therefore, we conclude that the job of the linker is to link the object code of our program with the object code of the library files and other files. The output of the linker is the executable file. The name of the executable file is the same as the source file but differs only in their extensions. In DOS, the extension of the executable file is '.exe', and in UNIX, the executable file can be named as 'a.out'. For example, if we are using printf() function in a program, then the linker adds its associated code in an output file.

Let's understand through an example.

hello.c

- 1. #include <stdio.h>
- 2. int main()
- 3. {
- printf("Hello javaTpoint");
- 5. return 0;
- 6. }

Now, we will create a flow diagram of the above program:

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Pune - 412307.



In the above flow diagram, the following steps are taken to execute a program:

- Firstly, the input file, i.e., hello.c, is passed to the preprocessor, and the preprocessor converts the source code into expanded source code. The extension of the expanded source code would be hello.i.
- The expanded source code is passed to the compiler, and the compiler converts this expanded source code into assembly code. The extension of the assembly code would be **hello.s.**
- This assembly code is then sent to the assembler, which converts the assembly code into object code.
- After the creation of an object code, the linker creates the executable file. The loader will then load the executable file for the execution.

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Dhanya Narayanan Chief Operating Officer

1. PLACEMENT CELL : Pictures



Students With Industry Delegates at Barclays

💽 GPS Map Camera

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The name says it all

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Pune, Maharashtra, India

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Manjari - Wagholi Road, Manjari Bk, Manjari Budruk, Maharashtra 412307, India Lat 18.524187° Long 73.982936° 17/03/23 12:08 PM GMT +05:30

Google

COLLEGE OF ENGINEERING



TECHZEN TECHNOLOGIES

Sr.no.149, Maulinagar, Magarpatta, Hadapsar, Pune 13. MOB : +91 7972 67 8241 | +91 9021 45 0920 info@techzen.co.in contact@techzen.co.in

Internship Letter

To Whom So Ever It May Concern

This is to certify that Atul Arjun Jambhale has successfully completed 3 months internship on "AWS Cloud Platform and Linux" Project with "Techzen Technologies Private Limited" from 10th October 2022 to 10th January 2023. He sincere & hardworking during his tenure at the organization.

We wish her good luck for his future endeavors

For Techzen Technologies Pvt. Ltd. Sompino Director

Branch Address: Shop No 3, Mithila Apartment Bytco Point, opposite Cinemax, Nashik, Maharashtra Pin- 422101. Contact: <u>9552054509</u> Web: https://www.HDFCbank.com

Date: 15/01/2023

INTENSHIP LETTER

This is to certify that Mr. Bhushan Rajendra Thorat has worked with HDFC Bank of India as an Intern from 08-10-2022 to 13-01-2023.

During the course of this internship he administered duties like Credit dues, Handling customers and Enforcement action processing. He was found punctual, hardworking and inquisitive.

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HR/EC/1222/10

December 10,2022

EXPERIENCE CERTIFICATE

To Whomsoever It May Concern

This is to certify that **Mr. Dnyaneshwar Ramchandra Rathod**, Student of PDEA's College of Engineering, Manjari (BK), has successfully completed the project on Predictive Analysis on Customer Buying Behaviour at Flipkart Private Limited Pune from the period **10-Sep-2022 to 10-Dec-2022**.

We found him to be a good team player besides being a hard worker. We wish him all success in his future endeavors.

For Flipkart Internet Private Limited

Shaik Samdani Basha Director - HR Shared Services

"This is an electronically generated document, hence will not be printed on letter head material."

Heg Vali Kor

Registered Office Vaishnavi Summit, Ground Floor, 7th Main, 80 Feet Road, 3rd Block, Koramangala, industrial layout, Bangalore - 560 034, Karnataka, India. Phone: 080 - 6730 2000



Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307. 5 | Page

PARVATI MULTISTATE

CO-OPERATIVE CREDIT SOCIETY LTD, PUNE REG NO-MSCS/CR/536/2012

DATE- 02 Jan 2023

Internship Certificate

This is to certify that **Mr. Kiran Kunjeda**, from PDEA'S college of Engineering Pune, has done 3 months of internship at **Parvati Multistate Co-Operative Credit Society Ltd**, Pune. From 27/09/2022 to 29/12/2022.

He has worked on a project titled Different Types of Loans Offered by PMC.

During this internship he has demonstrated his skills with self-motivation to learn new skills. His performance exceeded our expectations and he was able to complete the project on time.

We wish him all success in his academic endeavor and life.

Authorized Signatory Hadapsar, Pune-411028.

REGD. OFFICE:

Chintamani Plaza, infront of akashwani quarter, Utkarsh Nagar, Hadapsar, Pune,Maharashtra 411028

Web: www.parvticsl.com Email: parvticsl@gmail.com

Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307.

CERTIFICATE OF COMPLETION

CHARBHUJA TYRES

(Registered As CHARBHUJA CYCLE MART)



SHREE CHARBHUJA CYCLE MART

Shop No. 4, Ratan Park, Gadital, Hadapsar, Pune - 411 028. Mob.: 9890624682 / 9511648592. Email - shankarsongar@gmail.com

COMPANY CERTIFICATE

This is to certify that Mr. Santosh Dattatraya Raskar, student of PDEA College of Engineering & Management has successfully completed Summer Internship with us for the period of 21st Sept to 21st Dec 2022.

He has shown eagerness to learn, and he was very cooperative in nature and well coped up with the work given. He has gained a good knowledge to stand well for his future opportunities in his career.

We wish him all the best for his future endeavors.

Yours Sincerely,

Shankar Songar, Charbhuja Tyres

SHREE CHARBHUJA CYCLE MART

PROPRIETOR

apolloTYRES

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Office Address: Gold complex 3 rd floor near RTO office ekta nagar Nashik Maharashtra. Pin- 422994

INTERNSHIP LETTER

This is to certify that Ms. Sarika Rodu Gaikwad has worked with Fast Tech Technologies Pvt Ltd as an Intern from 20-09-2022 to 24-12-2022.

During the course of this internship he administered duties like Testing, handling and Enforcement action processing. She was found punctual, hardworking and inquisitive.

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Authorized Signatory

COMPANY EXECUTIVE FACT TOCH TECHNOLOGY PVT. LTD. NASHIK

Contact: 9422906625 Web: https://www.fasttechtechnologies.in



जावक क्र. :

दिनांक : 10 / 1 /२०23

CERTIFICATE

TO WHOMSOEVER IT MAY CONCERN

This is to certify that Miss. Sayali Uttam Jadhav student of MASTER OF BUSINESS ADMINISTRATION from COLLEGE OF ENGINEERING MANJARI BK. has satisfactorily completed his project from 20th November 2022 to 5th January 2023 on "RATIO ANALYSIS"

We have found him to be sincere, hardworking and he has taken initiative and a lot of efforts towards completing his training to our satisfactory and expectations

We wish him all success in his future endeavor.

Place : Hadapsar, Pune. Date : 10th January 2023

Toganel **Chief Executive Officer**




Rot

GURUDATTA INDUSTRIES

Plot No. B/14, Kirloskar Society, Mahadev Nagar, Manjri Road, Pune - 412 307. M.: 9881878443

Date :

TO WHOM T MAY CONCERN

This is to certify that **Mrs. Sayali Ramdas Tilekar** is a student of "Master and Business Administration" at PDEA's College of Engineering Manjari Bk, under Savitribai Phule University of Pune has successfully completed 02 Months (10th Oct. 2022 to 10th Dec.2022) short term Internship programme in our organisation. During the period of this Internship programme with us in Manufacturing Process i.e. Lean Manufacturing, Kaizen, 5 S PDCA Cycle and total Quality Management, we give him an opportunity to work with us.

We wish him every success in life.

Sincerely, For Gurudatta Industries

Gurudatta Industries

Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307.



Internship Completed at Mentored Minds

This is to certify that DEGLOORKAR SUMIT MAHADEV		Has completed 2 Months of Internship	
at Mentored Minds Pvt. Ltd for the Role of	:	Data Analytics Intern	
During this internship the tasks given w work was sincerely done to deliver the	vere perfo work pacl	ormed with best efforts and the kets.	
We wish you all the best and you will ha	ave a won	derful Career ahead!	

Harshal Mody Contact-+919923342240 Mentored Minds

Pune, Maharashtra, India-411038

nds Pr Director



Principal Pune District Education Association's College of Engineering Manjari (Bk.), Pune - 412307.

MEMORANDUM OF UNDERSTANDING

This MEMORANDUM OF UNDERSTANDING (MoU) is entered on 1st April 2018 between

IBS,

Marketing Office A/211 To A/214, Mega Center Behind Corporation Bank,

Next to Nobal Hospital, Solapur Road Hadapsar, Pune -411028. Represented byMr. Sharadchandra Joshi & Mr. Sudhir Kumar Vishwakarma And

> PDEA's College of Engineering Manjari (Bk), Hadapsar, Pune-412307,

IBS and PDEA's College of Engineering Manjari, are also referred to individually as 'First party' and 'Second party' respectively and collectively as 'parties'.

Article 1: Objectives of MoU

Some broad goals of this MoU are to:

- Make aware the faculty in innovative methods in teaching
- 2. Improving faculty's soft skills, interpersonal skills
- 3. Training the faculty to develop leadership skills among the students and overall personality development of student.
- 4. Conduct group discussion and activities for improvement of interview skills of students.
- 5. Introduce business skills for entrepreneurship development.

Article 2: Activities involved

- Guest lecture/Session on group discussion, preparation of personal interview, business communication



Article 3: Roles of First party

- Company will conduct seminars related to the topics mentioned in the objectives.
- 2. Company will provide guidance to students in said topic.
- Company will provide Journals to keep in Library. 3.
- 4. Company will provide Banner to display on the entrance of the Library.

article 4: Roles of Second party

1. To communicate with the first party and notify students about available time slots about conduction of activity.

2. Provide necessary infrastructure to conduct sessions, training programs etc.

rticle 5: Outcomes

his MoU will enable the students

To experience and appear with confidence group discussions and personal interviews

- 2. To find placement after the graduation.
- To develop interpersonal skills. 3.

is MoU will enable the faculty

To improve the soft skills. 2. To develop the personality and leadership skills among the students

rticle 6: Duration of MOU

is MoU shall remain in force for a period of FIVE years commencing from the date of ining of this document from 1st April 2018To 31st March 2023. The parties reserve the right terminate this MoU by either party giving three month written notice to the other, where ch termination occurs, the provisions of this Memorandum shall continue to apply to going activities until their completion.

ticle 7: Financial terms / condition

sed on this intend both parties will decide jointly the commercial terms that would be tually beneficial for the success of this venture.

Article 8: Statement of Intent

Nothing in this MoU shall be constructed to as creating any legal relationships between the parties. This MoU is the statement of intent to foster genuine and mutually beneficial colleboration

collaboration.

Article 9: Amendments

Amendments to this contract, if any, will be made only after joint discussion and agreement between both parties and will require a freshly approved and signed agreement by the designated representatives of each party. The terms/clauses/articles in this MoU can be reviewed by mutual consent by serving three month written notice the other party. New or amended terms/clauses/articles may be agreed as of a renewed MoU.

PDEA's College of Engineering Manjari and IBS, Pune welcome the establishment of this MoU for cooperation & jointly agree to the provisions as set above. This MoU shall be effective from the date of its signing.

- Dr. R.V. Patil
- Principal,
- DEA's College of Engineering
- Aanjari (Bk), Hadapsar,
- une-412307, Maharashtra, India



Mr. Sharadchandra Joshi,

Branch Manager,

Marketing Office A/211 To A/214, Mega Center Behind Corporation Bank, Next to Nobal Hospital, Solapur Road Hadapsar, Pune -411028.



महाराष्ट्र MAHARASHTRA 0 2022 0

44AA 137604

ज्या काण्यामाठी ज्यानी पुडाफ खांग्टी केला त्यान त्याच कारणाता ज्या काण्यामाठी ज्यानी पुडाफ खांग्टी केला त्यान त्याच कारणाता पुत्राक खोटी केल्यापात्तुन ६ महिन्यान वापरण धध्वकारक आर्थ

प्रहांक विकत घेणाऱ्याची सदी तते = २०'२ कंशतनार पहल

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MEMORANDUM OFUNDERSTANDING (MOU)

This MOU is a legal agreement made between "KDN Infotech Pvt. Ltd. & V And K Softtech Solutions Pvt. Ltd."

AND

College Name. PDEA's College Of Engineering, Manjari

Purpose:

The purpose of this Agreement is to establish a relationship between the company and College by organizing mentorship and guidance programs for the students to grow their career with the right decision.

Term:

The initial term of this Agreement shall be for five years, from July 1, 2020200 June 30, 20-with the option to renew for up to an additional five years, except that either Party may, at any time, with or without cause, terminate this Agreement by providing the other Party with thirty (30) days advance written notice.

बहजन हिताय, बहजन सुखाय

Objectives:

 As we are education training &Placement Company we provide the programming language training and job oriented placement programs Our excellent training staff will help you to boost programming knowledge &build career in well-known IT Industry.

Pune District Education Association

- We will provide IT Career guidance to candidates which will help them to select the career path.
- IT Industry Awareness
- Course guidance for Non-IT candidates, so it will be easy for them to select a proper course to enter into an IT field and build their career.
- Guidance on Aptitude test
- Free Internship for Post graduate shortlisted candidates.
- Job oriented course

- Free Industrial & Embedded C programming language one month course.
- Free placement Calls shortlisted candidates.
- Confidentiality:

Licensee agrees to observe complete confidentiality with respect to the College, and will not disclose any information, copy, reproduce or alter the Information provided.

Notice:

- This Agreement may be executed in several counterparts, each of which shall be an original, but all of which together shall constitute one and the same Agreement. The Parties agree that any xerographically or electronically reproduced copy of this agreement will have the same legal force and effect as any copy bearing original signatures of the Parties
- 2) This document constitutes the entire agreement between the parties and any prior or contemporaneous representations, either oral or written are hereby superseded. This Agreement may not be modified, amended, altered or extended except through a written amendment signed by each party.

बहजन हिताय, बहजन सुखाय

IN WITNESS HEREOF, the parties hereto have executed this Agreement by properly authorized persons.



College Name PDEA's College Of Engineering, Manjari

(Authorized signatory)

lame: Vinod Jagtap Name: Dr V Patil		Name: Anuradha Jadhav	
Designation: Director	Designation:Principal	Designation: TPO	
Place: Pune	Place: Manjari	Place: Manjari	
Date: 1 st April 2023	Date:1 st April 2023	Date:1 st April 2023	



Memorandum Of Understanding

THIS MEMORANDUM OF UNDERSTANDING IS MADE AND EXECUTED AT PUNE ON THIS 1st DAY OF JANUARY IN THE YEAR TWO THOUSAND AND TWENTY-THREE (01/01/2023),

BETWEEN

1. Pune District Education Associations College of Engineering, Manjari (BK), Hadapsar, Pune-412307

Hereinafter called and referred to as the "THE PARTY OF THE FIRST PART" (Which expression unless repugnant to the context or meaning thereof, shall be deemed to mean and include themselves their respective heirs, legal representatives, executors, administrators and assigns) OF THE FIRST PART.

AND

2. PHN Technology Private Ltd., a registered company under the provisions of the Companies Act 2013, having its office at Solitaire Business Hub E Wing 5010, F wing 5010 & 5020, 5th Floor Viman Nagar, Pune, Maharashtra 411014

Hereinafter called and referred to as the "THE PARTY OF THE SECOND PART " (which expression unless repugnant to the context or meaning thereof, shall be deemed to mean and include the said company, for the time being, and from time to time its respective heirs, legal representatives, executors, administrators and assigns) ... OF THE SECOND PART.

WHEREAS the party of the SECOND part is willing to provide Job Oriented Training Program for the next three years for free of cost;

AND WHEREAS on learning the intention of the party of the First Part, will fulfil the activities described in roles and responsibilities;

And Whereas On Learning The Intention Of The Party Of The First Part, Will Fulfil The Activities Described In Roles And Responsibilities;



Solitaire Business Hub E wing 5010, Near Pheonix Mall, Viman Nagar, Pune, Maharashtra, 411014.





www.phntechnology.com



Roles and Responsibilities

THE FIRST PART:

 THE FIRST PART will provide space (Hall/Classroom/Lab) to conduct the program and allow students to access Free Job Oriented Training Program facilities

THE FIRST PART will dedicate staff members who will have to authority to

coordinate with THE SECOND PART

 THE FIRST PART will have to conduct 8 -10 activities which will be provided by THE SECOND PART upon mutual understanding and agreement.

ACTIVITIES:

- Downloading Apps
- Taking Credit Cards: After the parent takes the Credit Card from any one of our banking partners, then his/her child will get the stationary free:
- For 1 Credit Card, 1 set of stationaries will be provided free of cost.
- For 2 Credit Cards, 2 sets of stationaries will be provided free of cost.

THE SECOND PART:

- Yearly 2 Career guidance webinars by IIT Graduates
- Yearly 2 Advanced technology training program/workshops
- Corporate readiness training
- Yearly 4 Webinars by Industry Experts
- One Industries expert Mentor will be provided to the college
- Internship to students as per the industries requirement



Solitaire Business Hub E wing 5010, Near Pheonix Mall, Viman Nagar, Pune, Maharashtra, 411014.



1800 209 2288

www.phntechnology.com



1) Mr. Dr. R.V. Patil. -

Pune District Education Associations College of Engineering, Manjari (BK), Hadapsar, Pune-412307 Principal Through its Principal of the College Through its Principal of the College THE PARTY OF THE FIRST PART Pune - 412307.

Witness 1 for THE FIRST PART



Witness 1 for THE FIRST PART	
Name: Prof. Anuradha A- Jadhav	
Signature:	
Date: 02 / 01/2023 Pune District Education Association's	
College of Engineering, Manjari (BK.),	
2) Mr. PRADIP NARAYANKAR	
PHN Technology Private Ltd., Through its Director	
THE PARTY OF THE SECOND PART	
Witness 2 for THE SECOND PART	
Name: Amol Hauserao Klapcale	1







2.2ROLE OF DEPARTMENT OF E&TC:

- 1. DEPARTMENT OF Department of E&TC will provide the basic infrastructure required to run the courses.
- 2. The students for the training in specialized area of industrial automation will be provided by E&TC.
- 3. There will be no collection of any payment by either party

3.0 PERIOD OF MOU:

This MOU is valid for three years from the date of MOU signing.

We agree for the above memorandum.





Head of Department Electronics and Telecom Engg. Department PDEA's College of Engo. Manjari (Bk.), Pune

(Prof.R.M. Sahu)



Date:06/08/2019

Place: Pune