



AISSMS
INSTITUTE OF INFORMATION TECHNOLOGY
ADDING VALUE TO ENGINEERING



DEPARTMENT OF COMPUTER ENGINEERING

TECHNICAL MAGAZINE 2021-2022





DEPARTMENT OF COMPUTER ENGINEERING

Vision

To create an Engineer, receptive to the changing demands of the global market .

Mission

- To provide technically competent professionals in service to Nation.
- To prepare graduates to respond to the needs of dynamically changing technology.

Program Education Objectives(PEOs)

- **PEO1:**To prepare graduates to work productively as successful Computer professionals.
- **PEO2:**To prepare graduates with latest skills in the field of technologies supplemented with practical orientation to face challenges of modern computing industry.
- **PEO3:**To provide environment that fosters professional growth, communication skill, team work, life-long learning skill and ability to create awareness in society about applications of technology.

Program Specific Outcomes (PSOs)

PSO1 Problem Solving and Programming Skills: Graduates will be able to apply computational techniques and complete individual practical experiences in a variety of programming languages and situations.

PSO2 Professional Skills: Graduates will be able to design and develop efficient and effective software by following standard software engineering principles.

PSO3 Successful Career: Graduates will be able to become entrepreneur and to pursue higher studies / career in IT industries.



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Program Outcomes (POs)

Graduates will be able to

1. Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems. **[Engineering knowledge]**
2. Identify, formulate, research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences. **[Problem analysis]**
3. Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations. **[Design/development of solutions]**
4. Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions. **[Conduct investigations of complex problems]**
5. Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations. **[Modern tool usage]**
6. Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice. **[The engineer and society]**
7. Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development. **[Environment and sustainability]**
8. Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice. **[Ethics]**



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9. Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings. **[Individual and team work]**
10. Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions. **[Communication]**
11. Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments. **[Project management and finance]**
12. Recognize the need for, and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change. **[Life-long learning]**



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Editorial Team



Faculty Coordinators: P.S.Jadhav

I am happy to introduce you to our departmental technical magazine. I take technical magazine as a chance to focus on the projects, seminar topics that the scholars undertake enhancing their information. Through projects that students execute it provides chance and platform for the young students to showcase their talent which may even be helpful to any or all others to spice up their technical information. I think that this magazine serves the aim.

Student Coordinators:



Harshal Nikam



Bhargavi Mahashabde



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Objective behind Technical Magazine

Department of Computer Engineering is extremely happy and proud to publish technical magazine of year 2021-22. We had collected project titles & seminar topics from our students. Our objective behind sharing this data is .To encourage students and to make awareness among them concerning current want in IT trade.

Department has set objective to bring technical ability among the scholars. Department is taking efforts for same since second year. Department arranges numerous professional lectures, workshops, industrial visits, learning contents beyond syllabus for students. Activities are planned to create students aware of current demand of IT trade. Outcome of those efforts is mirrored through their final year comes, placement and admission to higher studies.

Coordinator

Mrs. P.S.Jadhav

HOD

Dr. S.N.Zaware



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I. INDIAN GOVERNMENT 5G HACKATHON

It all started in the Department of Engineering Sciences. An idea to make an indigenous alcohol Breathalyzer for the college tech fest. We started of looking for sensors, microcontrollers, leds, Comparators and what not. Thus, began the journey of our dream Project SHERSHAH- A smart vehicle and vehicle accident management system. The alcohol Breathalyzer was a huge hit. I won the First Prize in the Mini Project Competition held on Department Level. As soon as we entered the Second Year, we were welcomed by a beautiful opportunity by the Alumni Association of College of Engineering Pune.

The Alumni Association of College of Engineering Pune conducts the “The Technocraft Booth Competition”. Under this initiative the students are called to present their idea in front of a panel of experts. On approval the teams have to work over a period of 6 months and develop those ideas into market ready product. The journey began with me integrating a team together. I was successful enough to build a team comprising of students from my engineering department ie Computer Engineering, Instrumentation Engineering and Electronics and Telecommunication Engineering. Our idea was a system for the upcoming automobile industry. Inspired from the vision of Industry 4.0, huge hype of 5G and the craze for autonomous vehicles we came up with an idea- A smart system based on Internet of Things and Artificial Intelligence to detect accident and report the accident to nearby hospital and ambulance for fast and speedy evacuation of patient. The solution had numerous loopholes. As soon as the idea was ready for demonstration. The model developed was just a proof of concept. It was still on a toy car. The jury immediately pointed out and asked for a proper road map to implement on actual vehicle. Though we hit a road block, MrsVaishali Chiplunkar Madam a retired official for Bajaj Automobile suggested us that we make use of On Board Diagnostics Tool. It was her idea that opened doors for us to take the idea to product level. At this stage we presented our idea on many platforms. As the platforms were increasing so was the future of the project becoming very bright and I as a promoter learnt many new tactics of product promotion. I would take this opportunity to thank Mr. Bharat Oswal TEDx Head Pune who guided me in one such even of Festival of Future. He taught me the tactics of idea pitch and stage presentation that help me even today. The best part is he still stays in touch.

The biggest set back was still waiting for us. We took our idea to E-Summit IIT Bombay. As soon as we pitched it to Morris Garage’s, Navdeep Saini sir the representative was spontaneous enough to show us the reality. One the idea was already being developed in back end and two we had no business model.

The other setback came in and it was the Lockdown. I was restricted to the four walls of my room and I could see my project moving to close archives. But where there is a will there is a

way. I presented my idea to Indian Government who was then conducting 5G Hackathon to promote 5G use cases in India. I collected all my knowledge, all my experiences, rectified my mistakes, developed a business model and finally drafted my application for 5G Hackathon India. I still remember the midnight when I was lost in thinking about my future and the thought of project having no path ahead. It made me insecure but at that moment I just checked my mailbox to receive a mail asking for my bank details by Government of India. Long Story cut short our idea was in top 100 out of the 4000 applications received from all over India. We received a huge grant of INR 1 lakh from Indian Government. Since then I have been working on developing my idea into a product.

This has been the best experience of my life. This time also I was obstructed by a Lockdown but the odds were in my favor this time. We put together a solution with the help of all the expertise provided by Indian Government. We were guided by Department of Telecommunications Indian Government, IISc Bangalore, Qualcomm, Vodafone Idea and Airtel in understanding the dynamics of 5G. I could not thank god for giving me this opportunity to work with the most brilliant minds of the country. So moving to our product we identified how the Can Bus Protocol operates on the On Board Diagnostics. Using the OBD (ELM 327 Dongle), we relay the telematics data to our specially designed hardware to collect and relay the data to our smartphone. The smartphone holds the application that acts as a communication gateway to the cloud. The cloud holds the algorithm to identify nearby hospitals, pass on the vehicle data, driver data and accident report to insurance provider for paper less claim procedure. The web portals were designed for other entities. This defined our business model as well with road safety and insurance automation being our USP. We then moved to KPIT SPARKLE 2022 and this was the game changer for us. While we were in talks with Indian Government and Mr. Alex Vikas Head of Telecommunication Center of Excellence for developing our product, we also made it to the KPIT SPARKLE top 100. Rigorous training sessions, webinars, talks with industry experts and orientations crafted us into rising innovators. We were introduced to concepts like lean canvas model, value proposition model and market segment terms we only could nail in a MBA degree. Mr. Vishal Pillai from KPIT was one such guide who helped us on the journey to make our product more market ready. We learnt the idea of simulation, virtual prototyping using MATLAB, 3D Experience by Dassault Systems and trust it was worth the journey. On the journey to understand dynamics of business I was able to go through dynamic market movers like AIRTEL JIO Telecom war, AMUL and Nestle Maggie crisis management, making a monopoly like ASIAN PAINTS and becoming visionary like ZOMATO hyper lopp.



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Today the project stands in Phase 2 of Indian Government 5G Hackathon, Pre-Finals of KPIT SPARKLE 2022. The learning which I took from the journey is priceless. I led a great team on a wonderful vision. I found a really great partners who can look after the well being of the project, finances, research and development and my presentations. What started with an idea today is an emotion for us, it is the heart of HORIZON TECH family- Our brain child to lead road safety in INDIA.

-Kshitij Thakur

II. TECH STARTUP



Name	Role
Aniket Chopade (CEO and Mobile app developer)	<ol style="list-style-type: none"> 1. Ideation and product strategy. 2. UI / UX designing for web and native app. 3. Converting into PWA's to be a installable web app. 4. Android development using Java. 5. Unity AR app dev using C# 6. AR app dev using Java in Android studio. 7. Working with SQLite database for on-device storage. 8. Developing and testing hardware smart trolley using nodemcu. 9. Planning and implementing PPT's and other startup related documentation. 10. Cold calling and on-field sales.

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<p>Ashish Patil</p> <p>(CTO and Backend developer)</p>	<ol style="list-style-type: none"> 1. Building and maintaining backend API using Django. 2. Implementing backend infrastructure for the ecommerce react app using NodeJS. 3. Hosted and maintaining overall cloud infrastructure on AWS EC2 and other related tech. 4. Building Admin dashboard backend along with deployment. 5. Implementing server-side logic for smart shopping trolley using web-sockets.
<p>Rushikesh Susar</p> <p>(Frontend Developer/MERN stack dev)</p>	<ol style="list-style-type: none"> 1. Designed and developed overall Ecommerce React app. 2. Implement client side logic with API connections. 3. Developing startup's website using HTML, CSS and JS. 4. Making the complete app responsive with effective UI/UX. 5. Handling the overall frontend work of the web app.

III. ALUMINI EXPERIENCES

1)Alumini –Computer Engineering Department(2020-21 Batch)



Name: Tanmay Harshe.
Company Name: Coriolis Technologies.
Designation: Member of Technical Staff.

Experience:

I have spent 7 months in the Coriolis technologies as Member of technical staff. First, I got really good training through company. As a developer I got the chance to contribute in our product. Till now I have worked in different technologies and learned new tools.

Technical skills suggestions:

Strong knowledge of C, CPP, JAVA.

Good knowledge of shell commands, Python, Database.

Practice coding in CPP/JAVA.

2)Alumini –Computer Engineering Department(2020-21 Batch)



Name: Harshit Pandey

Company: Cognizant

Designation: Programmer Analyst

As an Alumnus of AISSMS IOIT, I would like to talk about what you can do to improve your chances to get jobs and be good at CS in general:

1. Being good at Data Structures and Algorithms: Most tests for SDE jobs will require you to pass coding tests and you'll be asked DSA primarily in the interview for higher packages. Start doing DSA from Leetcode/Hackerrank or any similar website with any language of your choice. (Preferably Java/C++/Python) Get good at DSA with this language, the number of languages you know don't matter - focus on being the master of one with the limited time you have. (Don't be a "Jack of all trades and master of none")
2. Have at least 1 good project you can explain to an interviewer which can show that you are capable of working on complex code with multiple functionalities. Use principles of OOP & good software design to make these projects. The easiest way to get started is to learn about Full Stack Development and make a project that is visible to your employer by deploying the project.
3. Explore various other paths for CS (**Do this only when you're done with the above two steps**) : Machine Learning/IOT/Data Science/Cloud/Distributed Systems/Cybersecurity/etc. Are some specialized fields under CS. Learning about them is very interesting and you may even develop novel projects and concepts which lead to research papers, patents and startups. They are very fun to learn about and in the future will be in heavy demand. If you're looking to go for a masters degree these research-oriented fields are the best choice.
4. Maintain a github account to learn about source control, you'll use it often when you work.
5. Spend 1-2 hours a day aside from college based on any of these skills - you will thank yourself later on in life.
6. Start as early as possible. Don't wait till the end.

3)Alumini –Computer Engineering Department(2020-21 Batch)



Name:Evana Mariam Thomas

Company: Capgemini

Designation: Software Engineer

As an Alum of AISSMS IOIT, there are certain things that I recommend to all students which can help you improve your chances at landing jobs within the IT industry.

Firstly, your fundamentals of different concepts such as Data Structures, Object-oriented programming, structured query languages and others should be strong. As the very first step of securing a job in most MNCs requires you to crack an MCQ based exam followed by a coding test, sound knowledge of these concepts can help you pass this first step successfully. You can take the help of numerous online resources to get well-versed with these concepts. If you are interested in the development side of the industry, try to dedicate at least an hour each day and practice coding problems on different sites such as Hackerrank, Leetcode and others. Developing a habit as such will help you in the long term.

One of my biggest recommendations to current students is to actively seek out internships in fields that interest you. Internships help you gain a lot of practical experience and knowledge. It gives you an insight into the corporate world and could be your first learning experience of how to work in groups with diverse people and can teach you how to solve conflicts. These skills are very valuable as you progress in your career.

Continuous learning is the need of the hour. Today with how rapidly the industry is changing, organizations demand employees to continuously upskill themselves. Some of the popular technological trends within the industry are Machine learning, Data Science, Big Data and Analytics and Cloud to name a few. Working on small-scaled personal projects in these areas can give you a competitive edge over your peers while applying for jobs. It also allows you to apply for atypical entry-level jobs at mid-sized firms and start-ups. This allows you to kickstart your career in the field of your choice in the initial part of your professional journey itself.

Similarly, good internships, projects and research papers in these subject areas can be useful in securing admits to Masters programs of your choice. Past extra-curricular activities as these are some of the deciding factors. Following some of these bits of advice during your academic journey can be very advantageous for your own personal and professional growth.

III. PLACEMENT OF ACADEMIC YEAR 2021-22

Sr.No.	Name Of Student	Name Of Company
1	AaroHi Mohrir	L&T Infotech
2	Abhishek Rajesh Agarwal	Capgemini
3	Achal Gajanan Narsale	L&T Infotech
4	Ajinkya Khandave	Blazeclane
5	Ajinkya Suryawanshi	Blazeclane
6	Aman Pramendra Kumar	Capgemini
7	Aniruddha Ambekar	Magic Software Enterprises India Pvt. Ltd.
8	Anjali Bharambe	Wipro
9	Ankita Pratapsingh Bhati	Hexaware Technologies Pvt. Ltd.
10	Anurag Dinkar Patil	L&T Infotech
11	Atharva Patil	L&T Infotech
12	Avina Wakchaure	L&T Infotech
13	Bhavesk Kailash Dalal	Capgemini
14	Gargi Rai	Blazeclane
15	Harshal Dilip Nikam	Capgemini
16	Himaja Venkatasaikumar Namala	Capgemini
17	Hritik Kucheria	JIO
18	Hrushikesh Anil Gore	Blazeclane
19	Kshitij Thakur	JIO

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20	Lagad Vaibhav	Tech Mahindra
21	Maedha Badgre	TCS
22	Mahesh Ramesh Raut	Capgemini
23	Manoj Sakat	DATAMETICA
24	Mansi Manoj Deshmukh	Capgemini
25	Medha Prashantrao Badgire	TCS
26	Nayak Gore	TCS
27	Neeraj Hemant Ranade	Capgemini
28	Neil Raymond Duraiswami	Capgemini
29	Nikhil Wani	Zensar
30	Nisha Milind Sangawar	Hexaware Technologies Pvt. Ltd.
31	Pallavi J adhav	JIO
32	Parag Padekar	L&T Infotech
33	Prachiti Bhagwate	Wipro
34	Pranav Kedar Sharma	Hexaware Technologies Pvt. Ltd.
35	Premraj Gawade	TCS
36	Radhike Pande	DATAMETICA
37	Ritika Rajeev Nambiar	Hexaware Technologies Pvt. Ltd.
38	Ruchita Ajit Pawar	Capgemini
39	Rutvik Jaiswal	Zensar
40	Sahil Hadke	Blazeclane

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41	Sakshi Sutar	TCS
42	Sameer Rajendra Sawarkar	L&T Infotech
43	Sanjana Pol	Zensar
44	Saurabh Shitole	TCS
45	Shamli Kavle	Wipro
46	Sharvari Kamble	Magic Software Enterprises India Pvt. Ltd.
47	Shashank Pravin Sangale	Capgemini
48	Shashank Sangole	TCS
49	Shreya Sunil	TCS
50	Shreyas Nandkumar Hogade	Capgemini
51	Shreyas Shailendra Gulavani	TCS
52	Shruti Surve	Wipro
53	Shubham Wable	Wipro
54	Shweta More	L&T Infotech
55	Soham Prashant Khandke	Capgemini
56	Soniya Chavan	TCS
57	Taher Idris Patrawala	Capgemini
58	Tanisha Nayak	TCS
59	Vaibhav Lagad	Zensar
60	Vijay Shastri	Zensar

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61	Vikrant Sawant	TCS
62	Vishakha Hrushikesh Zambare	Capgemini
63	Vishnu Parikh	Zensar
64	Sanjana Bhosale	Wipro
65	Sakshi Gaikwad	DATAMETICA
66	Gayatri Mangire	DATAMETICA
67	Siddhesh Kanthe	DATAMETICA
68	Kaustubh Salunkhe	DATAMETICA
69	Anushka Jayant Bagal	Cognizant
70	Gauri Nitin Waghlikar	Cognizant
71	Shrikant Vinod Bhalerao	Cognizant
72	Nilay Pande	Cognizant
73	Rohit Tukaram Badgujar	Cognizant
74	Priyanka Devendra Malwadkar	Cognizant
75	Sandhyarani Vilas Survase	Cognizant
76	Yogesh Suhas Naikwadi	Cognizant
77	Shashank Pravin Sangle	Cognizant
78	Akshada Bhandari	Cognizant
79	Varun Shivaji Bhandwalkar	Cognizant
80	Nikhil Sanjay Bhale	Cognizant
81	Anurag Prashant Doshi	Cognizant

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82	Yash Vijay Salokhe	Cognizant
83	Aditya Ramesh Thorat	Cognizant
84	Pratik Sunil Zimbire	Cognizant
85	Sayali Sudhir Shinde	Cognizant
86	Rajeshree Satish Kalburgi	Cognizant
87	Shruti Satish Modale	Cognizant
88	Premraj Kisan Pawade	Cognizant
89	Bhoomika Suresh Bhagwat	Cognizant
90	Pratik Tanaji Kadam	Cognizant
91	Harshal Ramchandra Kalunkhe	Cognizant
92	Nimish Sanket Khinvasara	Cognizant
93	Sakshi Nandkumar Nalwade	Cognizant
94	Digvijay Hanumant Jagtap	Cognizant
95	Nachiket Shivaji Suvarnakar	Cognizant
96	Shriyash Arun Parandkar	Cognizant
97	Vaibhav Ratan Ghole	Cognizant
98	Kunal Anil Bauskar	Cognizant
99	Bhagyashri Mahesh Patwardhan	Cognizant
100	Gaurav Bipinkumar Chauhan	Cognizant

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IV. PROJECT LIST OF ACADEMIC YEAR 2021-22

Group No.	Name of Student	Title of Project	Guide Name
1	Badgire Medha Prashantrao Nalwade Sakshi Nandkumar Narsale Achal Gajanan Survase Sandhyarani Vilas	Automated Blood Cell Detection and Counting via Deep Learning	Mr. C. N. Aher
2	Pawade Premraj Kisan Bhandwalkar Varun Shivaji Zimbire Pratik Sunil Suryawanshi Ajinkya Ashok	Mobile botnet dection	Dr. K. S. Wagh
3	Patwardhan bhagyashri Mahesh Malwadkar Priyanka Devendra Jadhav pallavi popat Gargi rai	Personality Prediction based on text and Image	Dr. S. N. Zaware
4	Chauhan Gaurav Bipin Sangale Shashank Pravin Pande Nilay Makarand Luktuke Varad Vivek	Predicting future price of pulses using machine learning algorithms	Mrs. P. S. Gaikwad
5	Thakur Kshitij Rajkumar Thorat Aditya Ramesh Patrawala Taher Idris Salokhe Yash Vijay	Smart Vehicle and Vehicle Accident Management System	Mrs. N. S. Patil
6	Padekar Parag Subhash Patil Anurag Dinkar Ukarande Hrishikesh Mahendra Pachpute Paras Rajendra	Image Caption generator using DL and NLP.	Mrs. A. G. Said
7	Gole Vaibhav Ratan Badgujar Rohit Tukaram Bharambe Anjali Sunil Koli Jyoti Saybanna	Flight delay prediction based on deep learning and Levenberg-Marquart algorithm	Mrs. S. P. Pimpalkar
8	Nikam Tejashree Tukaram Mohrir Aaroohi Rajendra Zambare Vishakha Hrushikesh Manike Ashwini Anil	Machine Learning Techniques For Stress Prediction In Working Employees	Ms. P. D. Bormane
9	Sawarkar Sameer Rajendra Gore Hrushikesh Anil Patil Rohan Dilipkumar Paygude Rutuja Jitendra	Identification of Informative Tweet during Disasters	Dr. S. N. Zaware
10	Bhandari Akshada Santosh Bhale Nikhil Sanjay	Role of ML in prediction of Heart Attack and	Dr. K. S. Wagh

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	Pol Sanjana Raju Bhati Ankita PratapSingh	Diabetes	
11	Agarwal Abhishek Rajesh Salunkhe Kaustubh Hanamant Bhagwate Prachiti Pradeep Suvarnakar Nachiket Shivaji	Surveillance Video improvisation by Coloring and enhancement of b&w Video	Dr. S. N. Zaware
12	Kadam Pratik Tanaji Kalburgi Rajeshree Satish Bhosale Sanjana Sajan Modale Shruti Satish	Sentimental analysis of COVID-19 Vaccination tweets by Machine Learning	Dr. S. N. Zaware
13	Anushka Bagal Maitrayee Dhumal Sofiya Shaikh Abhijeet khatri	Security system using face and voice	P. N. Gulhane
14	Wable Shubham Rajkumar Shitole Saurabh Sanjay Thorat Akshay Jitendra Sarde Rohit Rajendra	Classification and Identification of Multiple Leaf Diseases using Inception-Resnet V2 architecture	Mrs. M. A. Zope
15	Pardeshi Aishwarya Pravin Sunil Shreya Namala Himaja Venkatasaikumar Kakde Yash Samir	Vehicle route optimization based on multi-genetic algorithm and machine learning	Mrs. P. S. Gaikwad
16	Lagad Vaibhav Mohan Raut Mahesh Ramesh Sarade Akash Bibhishan Parandkar Shriyash Arun	Securing Land Registration using Blockchain	Mrs. S. P. Pimpalkar
17	Sharma Pranav Kedar Sharma Nitesh Sukhdev Vaibhav Shinde Sakat Manoj Laxman	Flag Brawl(game dev)	Mr. P. S. Sadaphule
18	Chavan Akash Anil Sawant Vikrant Pradeep Kamthe Siddhesh Sanjay Kakde Anirudha Janardhan	Leukemia Detection and Classification Using DL	Dr. K. S. Wagh
19	Dalal Bhavesh Kailash Patil Niket Virendra Satija Riya Rajesh Oswal Mahima Manish	Visual speech recognition using Lip movement for Deaf people using Deep Learning	Mr. G. J. Navale
20	Pawar Suvarna Dnyandev Khandave Ajinkya Sudam Parikh Vishnu Mahesh	Continuous integration to configure Kubernetes infrastructure over multi	A. Chavan

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	Deshmukh Mansi Manoj	clouds using Terraform and Ansible for continuous deployment of webapps.	
21	Chaudhari Prathmesh Kiran Gulavani Shreyas Shailendra. Hogade Shreyas Nandkumar Kulkarni Ashutosh Sanjay	Website configuration of multiple cloud	Mrs. M. P. Nerkar
22	Solse Nandini Rajendra Wani Nikhil Sandip Mangire Gayatri Rajesh Kumar Aman	Separating PDF from its category using NLP and ML	Mrs. P. S. Gaikwad
23	Bhagwat Bhoomika Suresh Chavan Soniya Santosh Pawar Ruchita Ajit Sisodiya Vedanti Bharatsing	Parkinson's Disease Detection Using Deep Learning	Dr. K. S. Wagh
24	Ambekar Aniruddha Anilrao Hrithik Tushar Kucheria Aher Nikita Nitin Sidwadkar Hrishikesh Keshav	Ad Fraud Detector for Mobile Application	Mr. G. J. Navale
25	Bhalerao Shrikant Vinod Watni Abhishek Kishan Duraismwami Neil Raymond	Classification and Detection of cattle breed based on what quality of milk	Mr. Chetan N. Aher.
26	Wakchaure Avina Satish Kavle Shamli Ajit Surve Shruti Shashikant Patil Apurva Sunil	MedBot: A medical Chatbot for Disease Detection and Suggestion through Deep Learning	Mrs. M. P. Nerkar
27	Deshpande Ninad Mahesh Hadke Sahil Yogesh Doshi Anurag Prashant Atharva Veerendra Patil	Customer Relationship Manager: Web Application	Mrs. M. A. Zope
28	Mandlecha Manas Manoj Sasturkar Shraddha Abhay Bisoi Manish Kumar	A data sharing protocol to minimize security and privacy risks of cloud storage	Mrs. A. G. Said
29	Ruthik Kale Nikam Harshal Dilip Lambate Kiran Dattatray Shaikh Saniya Salim	Healthcare Data Privacy using Homomorphic encryption with Machine Learning Model	Dr. S. N. Zaware
30	Khandke Soham Prashant Mohite Yash Dnyaneshwar	Sentiment Analysis of Audio Streams	Mrs. S. P. Pimpalkar

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	Kamble Komal Bhimashankar Rangila Mohammed Athar Mohammed Ali		
31	Nambiar Ritika Rajeev Sangawar Nisha Milind Shinde Sayali Sudhir Ranade Neeraj Hemant	Skin Lesions Classification and prediction with deep CNN	Mrs. M. P. Nerkar
32	Kamble Sharvari Sanjay Kadambari More Sapkale Neha Sharad Naikwadi Yogesh Suhas	Convolutional Neural Network for Self Driving car in Virtual environment	Mr. P. S. Sadaphule
33	Waghlikar Gauri Nitin More Shweta Rakesh Sakshi Sutar Londhe Shivani Devidas	Music genre classification and instrument recognition using deep learning	Mr. P. S. Sadaphule
34	Harshit Rakesh Mundra Tejas prakash Jadhav Vaibhav Ebidallu Mallepati Venkatsagar	Personalized Mobile App Recommendation by Learning User's Interest from Social Media	Mrs. Veena Bhende
35	Kalunkhe Harshal Ramchandra Ladani Aashit Lilesh Bhaskar Rohit Jalindar	nutrition analyser based on person workout using AI	Mrs. M. A. Zope
36	Deepak Kulkarni	sponsored project	Dr. K. S. Wagh
37	Mansi Pawar Animesh Galande Kunal Baviskar Nimish Khinvasara	Construction Machine Action Recognition Using DNN	Dr. S. V. Limkar
38	Pratik Sagale Digvijay Jagtap Vikas Lomate	An Efficient Electricity Theft	Mr. P. S. Sadaphule

V. SEMINAR LIST OF ACADEMIC YEAR 2021-22 TE-I SHIFT

Group. No	Name of Student	Topic Name	Domain Name	Guide Name
1	Shreya Sagar Bothara Shrutee Sagar Bothara Hrittika Gandhi Anuj Parmar	Hand Gesture Recognition for sign language	Machine Learning, Deep Learning	A.S.Chavan
2	Aditya Kumar Jaiswal Parth Rewoo Swapnil Prasad Mahajan Durvesh Sham	Food Bank	Web Developement	A.S.Chavan
3	Aniket Chopade Himanshu Bendale Harsh Aswar Ashish Patil	Smart AR Glasses	IoT, Machine Learning, Augmented Reality	A.S.Chavan
4	Aishwarya Dhotre Krishna Lagad Sushil Shinde Aakanksha Yadav	Blockchain Based Voting System	Blockchain	P.N.Gulhane
5	Onasvee Banarse Kaustubh Kabra Akash Mete Harsh Shah	Generative Adversarial Network for super resolution	Machine Learning	S.P.Pimpalkar
6	Gargi Agrawal Rakshe Sucheta Piyusha Khune Mansi Hulke	Natural Language Processing(NLP) : Analysis and Its Feature Extraction	Artificial Intelligence	P.N.Gulhane
7	Shreyas Dalwale Siddhi Gaikwad Ahire Pranav Rakshita Khadtare	Hyperloop Technology	IoT	P.N.Gulhane
8	Rutuja Hande Kumari Snehal Triveni Gawali Pournima Kamble	A Supervised Machine Learning Approach to Detect Fake Online Reviews	Machine Learning	P.M.Bhujbal
9	Mayuri Chavan Sheetal Bendgude Snehal Sutar Sampada Ahinave	Facial Expression Recognition	CNN	P.M.Bhujbal
10	Unnati Deshmukh Bhargavi Mahashabde	Twitter Sentiment Analysis	Machine Learning	S.P.Pimpalkar

DEPARTMENT OF COMPUTER ENGINEERING

	Shruti Mehta Parth Panse			
11	Rushiikesh Susar Mayur Patil Dange Yogesh	Implementation Of Web Scraping For E- Commerce Website	Web scrapping	P.M.Bhujbal
12	Archis Takalkar Abhishek Chirme Gupta Aryan Harshit Naidu	Role of IoT, AI, blockchain, drones and 5G in managing its Impact	Artificial Intelligence	A.S.Chavan
13	Anuj Chordia Sharvil Dholepatil Miraj Kadde Sunit Lohade	Big data in healthcare: Management analysis and future prospects	Big data and hadoop	P.M.Bhujbal
14	Vincent Simon Tushar Sharma Jadhav Pratik Korade Rutvik	Tackling Climate Change with Machine Learning	Machine Learning	G.J.Navale
15	Shubham Tarate Atharva Hendre Pratik Landghule Vedant Bhavirkar	Spammer Detection and Fake User Identification on Social Networks	Machine Learning	G.J.Navale
16	Tanishka Shinde Kshitija Shirke Rishikesh Nagale Harshal Sangle	Cyber Bullying Detection System	Machine Learning	G.J.Navale
17	Prarthana Chandak Nanavatti Bezan Patil Omkar Parth Desai	Pollution Analysis and Prediction	Machine Learning, Data Science, Web Development	G.J.Navale
18	Aniruddha Ghewade Hitesh Bamb Shinde Prikshit Pratham Jamkhane	blood bank management system	web development	G.J.Navale
19	Ankit Patil Siddhesh Undre Sutar Swapnil Nitish Bhise	Disease Prediction model using machine learning	Machine Learning	G.J.Navale

VI. SEMINAR LIST OF ACADEMIC YEAR 2021-22 TE-II SHIFT

Group No	Name of Student	Topic Name	Guide Name
1	Harshal Devman Raundal Peeyush Kumar Yadav Vaishnavi Katkar Sarvesh Mungurwadi	ML based Mandi (market) rate Forecasting	C.N.Aher
2	Aditya Bokade Shriniwas Khond Yash Deshpande Arjun Kakade	ML-based Diabetes Prediction System	C.N.Aher
3	Manish Bhamare Aniruddh Karekar Shubham Raut Pratik Chaudhari	Blockchain Disruption & Smart Contracts	C.N.Aher
4	Sayali Joshi Pragati Bhole Rana Shaikh Aishwarya Soni	Customer segmentation using ML	C.N.Aher
5	Rutul Wable Prasad Harihar Jayesh Rankhambe Omkar Chaundkar	Brain Tumor detection using Machine Learning	C.N.Aher
6	Rohit Divekar Prasun Bhunia Sushant kulkarni akanksha shelke	Ai based Real time emergency services tracking system.	V.S.Bhende
7	Vaishnavi Patil Rajlaxmi Bhosale Nikita Shetty Vama Shah	Deep Learning for Classification of Land Cover using Remote Sensing Data	V.S.Bhende
8	Kadam Ashitosh Shriram Janhvi Kridutta Prathamesh Sanas Savan Jadav	Protect private data using block chain system	V.S.Bhende
9	Komalika Sonawane Simran Mascarenhas Pratiksha Patil Prachi Sarak	Face mask detection using deep learning to control corona virus spread.	V.S.Bhende
10	Shriyash Band	Early Detection of Heart Diseases	V.S.Bhende

DEPARTMENT OF COMPUTER ENGINEERING

	Anish Dhawalikar Himank Tyagi Aditya Pokharkar	using AI and ML	
11	Sarthak Mane Shubham Sontakke Shivam Doshi Manish Pradhan	stock market analysis and trading algorithms	P.S.Sadaphule
12	Pallavi Shinde Ishika Mahajan Aniket Aher Prasad Amolic	Medical insurance cost prediction system using machine learning	P.S.Sadaphule
13	Chetan Agarwal Rana Pathan Shraddha Pathare Mustafa Sayed	Clean Track : A digital garbage tracking system and maintaining the city clean	P.S.Sadaphule
14	Sneha Parthe Akshata Wattamwar Vinayak Girhe Tejas Dhurde	Traffic Predictions for Intelligence Transportation Systems Using Machine Learning	P.S.Sadaphule
15	Vaishnavi Malshikare Sakshi Mandhana Devayani Pawar Prajakta Sasane	Helmet Detection	P.S.Sadaphule
16	Aditya Yadav Rajvardhan jadhavrao Sourabh Gaikwad Tanmay kuigade	Product Recommendation System	P.S.Gaikwad
17	Apurva Kate Vaishnavi Parkhi Shreyas Honrao Shubham Sonawane	Botanica: plant image detection using deep learning	P.S.Gaikwad
18	Aniket Nikam Soham Mulay Parind Tangle Prasad desai	3D Password	P.S.Gaikwad
19	Ninad Shirsat Ronit Patil Kunal Bumb Atharv Satpute	Sentiment analysis	P.S.Gaikwad
20	Om Autade Omkar Giri Aishwarya Kamble	Emotion based music player	P.S.Gaikwad

DEPARTMENT OF COMPUTER ENGINEERING

	Yash Sonawane		
21	Varshan Umredkar Athang Patil Saish Anmal Prasad		P.S.Gaikwad

VII. GLIMPSES OF PROJECT TOPIC

1. Project Title: Medbot: A Medical Chatbot for Disease Detection and Suggestion through Deep Learning

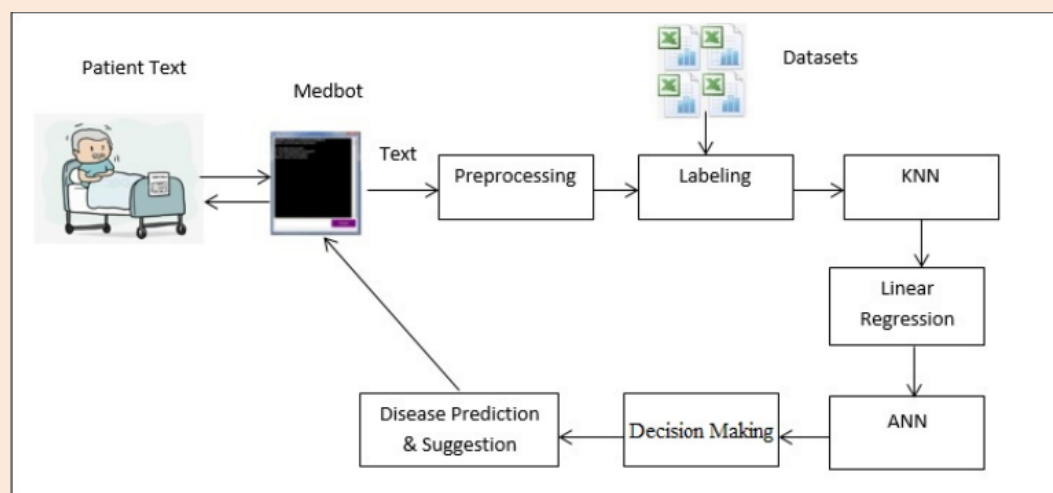
Introduction

A lot of individuals lack sources for interaction and remedial countermeasures that need to be administered rapidly and without delay. Unlike static apps, user intentions and choices may be understood and communicated through interfaces. Such technology quickly gains popularity in the field of medicine, where there is insufficient expert care. Chatbots are capable of providing a more cost-effective and accessible alternative.

Machine Learning technology has thus been chosen for this purpose as it offers great precision. The presented utilizes K Nearest Neighbor clustering along with Linear Regression, ANN, and Decision making for highly accurate disease predictions.

System Architecture

The system overview diagram depicts the system as a whole, with the major modules shown as blocks. The data set is first provided for preprocessing. The preprocessed data is then labeled and provided to k-nearest neighbor for clustering. The clusters are then provided to ANN for probability score evaluation, and the scores are finally provided for classification and decision making, resulting in highly accurate disease prediction.



Applications

- Provide medical assistance.
- These bots can also play a critical role in making relevant healthcare information accessible to the right stakeholders, at the right time.

Conclusion

An intelligent medical chatbot can be beneficial provided users recognize the symptoms they have reported, diagnose them appropriately, and treat them appropriately. The chatbot does not need the aid of any doctor, and this is one of the key benefits of a chatbot, in order to offer correct health care interventions to clients. In addition, cost efficiency in a chatbot is a key attraction for users. The chat with users is completely personal and this helps users to be more open with their health matters and paves way for the chatbot to efficiently identify the disease. Therefore, this research has been essential in determining the perfect characteristics as well as the common problems in the current implementation through the research.

Project Guide: M.P.Nerkar

Names of the project Group Members

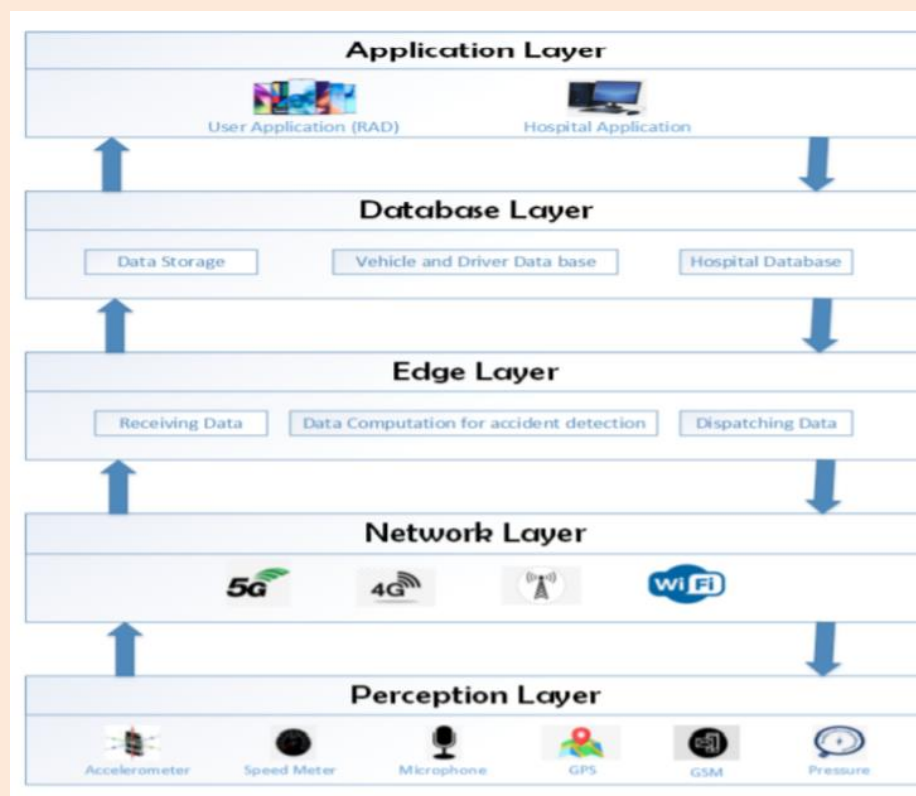
- 1.Wakchaure Avina Satish
- 2.Kavle Shamli Ajit
- 3.Surve Shruti Shashikant
- 4.Patil Apurva Sunil

2. Project Title: Smart vehicle & Smart Accident Management System for Automobile

Introduction:

Due to the rapid increase in population, vehicle numbers are increasing, resulting in a large number of road accidents. The majority of the time, casualties are not appropriately discovered and reported to hospitals and relatives. This lack of rapid care and first aid might result in life loss in a matter of minutes. To address all of these challenges, an intelligent system is necessary. Although several information communication technologies (ICT)-based solutions for accident detection and rescue operations have been proposed, these solutions are not compatible with all vehicles and are also costly. Therefore we propose a smart vehicle and vehicle and accident management system for a smart city. This solution is based on the telematics and Internet of Things. This solution will also lay the foundation for user based insurance system and help the insurance industry to become more regulated, highly vigilant and profit making industry.

System Architecture:



Working:

The telematics hardware unit works on the principals of Internet of Things. It comprises of OBD II data extraction ports, accelerometer gyroscope, GPS and wifi/Bluetooth module. Using the above modules the telematics unit can monitor the parameters of vehicle such as speed, RPM, G force, alignment of the vehicle, temperature, fuel pressure, brake pressure, air bag flags. This data is sent to our cloud via smartphone application. This data is monitored and the user behavior is monitored for accidents, driving anomalies. This data thus can be used to cater the problems of instant medical support during accidents, automatic insurance claim procedures, user based insurance costing, incentivizing the drivers who drive safely, government can monitor the road infrastructure and non insured drivers can be penalized. In the first phase we will be focusing on the on road medical assistance portal. So as soon as an accident will be reported the data will ping nearby hospital (registered on our website) and once the ping is received help will be provided to the victim. Also as soon as a victim is accepted the medical history of the patient will be shared prior to his evacuation to avoid time delay in initial diagnosis of the patient.

Conclusion: The above accident management system will provide an excellent platform for roadside assistance to the automobile drivers. With the system the crucial time required for saving the lives of victims is saved. This system can lay the foundation to smart roads and connected vehicles in India. Thus using the system we are able to connect the vehicles with the hospitals and provide a safe driving experience to the consumers of this system

Project Guide: N.S.Patil

Names of the project Group Members

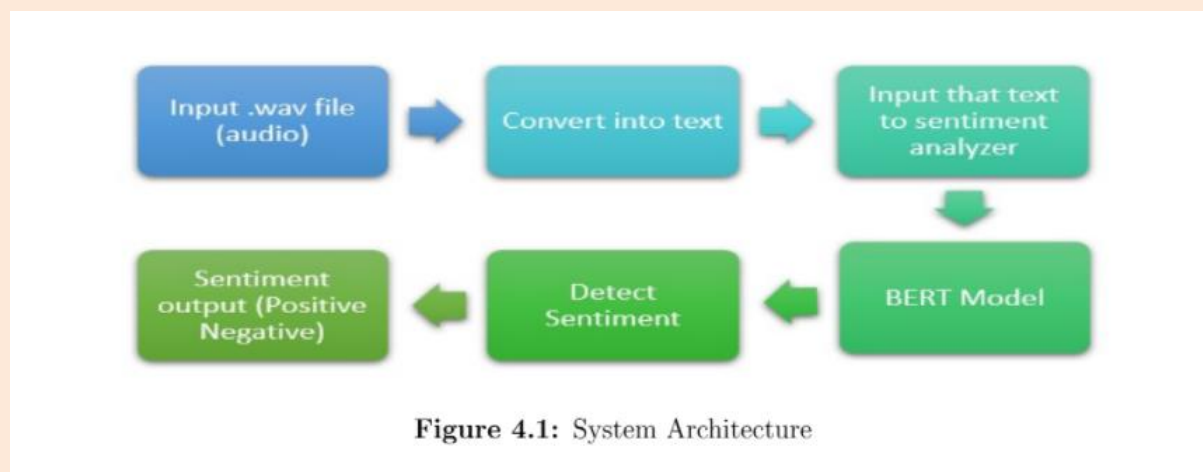
- 1.Thakur Kshitij Rajkumar
- 2.Thorat Aditya Ramesh
- 3.Patrawala Taher Idris
- 4.Salokhe Yash Vijay

3. Project Title: Sentiment Analysis of Audio Streams

Introduction

In this digital era, a huge amount of information/data is generated every second.

This information generated every time is used for multiple purposes such as scientific research, medical research, news generation, informational blogs, etc. This information is generated in several different formats. One of them is the audio format. This information can in the form of call recording, video recordings, or only audio recordings on blogs or websites, or on some other server. Making any sense out of that data is a monotonous task. It is very important to note that sentiment detection using text is an area of research, and significant attention has been given to product reviews, we focus our attention on dual sentiment detection in an audio based on text analysis. The difficulty stems from a variety of factors including noisy audio due to nonideal recording conditions, foreign accents, spontaneous speech production, and a diverse range of topics. Our approach towards sentiment extraction from audio and video is first convert the speech into text using speech to text convertor and then by using pertained BERT model we will find the sentiment . An important characteristic of our method is the ability to identify the individual contributions of the text features towards sentiment estimation. We evaluate the proposed sentiment estimation on both publicly available text databases and audios.



Applications

1. Product based review filtration

Now a days there are many eshopping websites so lots of people buys the products online and some people instead of writing a review they directly make a call and directly give their feedback about that product instead of writing the reviews on that website. So it is not possible to hear each and every recording and generate the data manually. So here our system directly gets the sentiment of the call recording and generates the data in automated format so we can clearly segregate the calls whether positive or negative so it will be faster.

2. For monitoring some political leader or some officer Now in today's world everybody has phones so mostly each and every office has a feedback / complaint helpline number so our system can also be used there to find out how many number of bad impressions are getting about that officer and how many good are getting our system can segregate number of positive and negative feedbacks.

3. For defence purpose

Now in today's world many phone calls are made so lots of people get connected easily with calls. So also by getting connected became more easier through phone calls the criminal minded people also get connected any it have become easier for them also to plan and give instructions. So by our system we can also monitor the calls and get the sentiment out of it.

Project Guide: S.P.Pimpalkar

Names of the project Group Members

1.Khandke Soham Prashant

2.Mohite Yash Dnyaneshwar

3.Kamble Komal Bhimashankar

4.Rangila Mohammed Athar Mohammed Ali

4. Project Title: Role of ML in prediction of Heart Disease and Diabetes

ABSTRACT

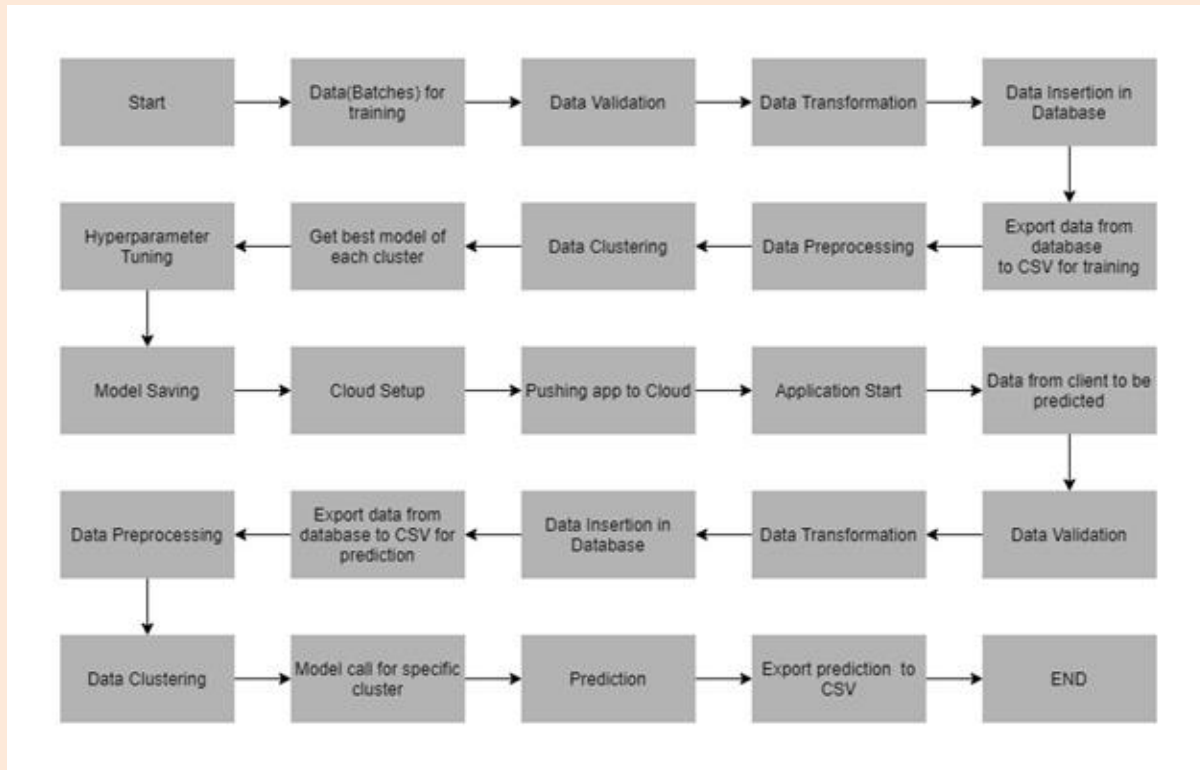
As the risk of diabetes and heart diseases have surged in past years, many of the machine learning algorithms are helping in early prediction of this problem which can help in reducing the deaths/serious problems causing due to these diseases. The busy schedule of the modern era leads to an unhealthy lifestyle which causes many health related issues which can also be an active element for heart diseases, diabetes, hypertension. Factors like blood pressure, smoking, age, family history, unhealthy diet, lack of exercises are the factors responsible for cardiovascular diseases. The proposed machine learning framework will predict heart disease and diabetes. The system's architecture follows classical machine learning steps for implementation. The system will take input of required data from users for prediction and will be sent to backend model for processing and giving predictions. This will help people to detect disease at early stages. This follows the principle, "Precaution before cure".

INTRODUCTION

Cardiovascular diseases are the most life-threatening diseases. Over a period of time, they have become very common and now outstretched the healthcare systems of countries. We aim this project for effective prediction of cardiovascular disease i.e. Heart disease and diabetes using a machine learning framework. This will help doctors as well as patients for early prediction of disease so that they get proper treatment. Prediction of heart disease is a very recent field as the data is becoming available. Other researchers and scientists have approached it with different techniques and methods. Cardiovascular diseases are considered as the most life-threatening syndromes with the highest mortality rate globally. Over a period of time, they have become very common and are now overstretching the healthcare systems of countries. Machine Learning based Cardiovascular Disease Diagnosis framework is proposed for the effective prediction of cardiovascular diseases with high precision. Machine Learning based Cardiovascular Disease Diagnosis is highly reliable and can be applied in the real environment for the early diagnosis of cardiovascular diseases. During past decade, researchers have proposed many algorithms for the prediction of Cardiovascular Diseases by using different datasets and techniques. The common datasets which are used for the prediction include: heart disease, Cleveland, Framingham and Cardiovascular Disease. These datasets consist of different attributes that are used for the prediction of these diseases. The factors which are involved in cardiovascular disease include modifiable and non-modifiable risk factors. Non-modifiable are the one that cannot be changed such as age ethnicity, and family history. Whereas, the modifiable risk factors such as Smoking, unhealthy lifestyle, blood pressure, and cholesterol can be changed and controlled by taking certain precautions and medication. To deal with this disease, there are several methods of prevention, such as natural methods, like stopping smoking, maintaining a healthy weight, adopting a healthy diet and practicing sports regularly. We also have the scientific methods such as drugs and surgeries. The prediction of this disease before being infected is part of the prevention methods, or the computer tools are the most used means in it, more precisely the

Machine Learning algorithms.

SYSTEM DESIGN



Project Guide: Dr.K.S.Wagh

Names of the project Group Members

- 1.Bhandari Akshada Santosh
- 2.Bhale Nikhil Sanjay
- 3.Pol Sanjana Raju
- 4.Bhati Ankita PratapSingh