



VELAMMAL
INSTITUTE OF TECHNOLOGY
Chennai - Kolkatta Highway, Panchetti, Ponneri



INSTITUTION'S
INNOVATION
COUNCIL
Ministry of HRD, Government of India

FutureSyne

2024-2025

**DEPARTMENT OF
COMPUTER SCIENCE AND ENGINEERING**



ABOUT DEPARTMENT

The department of Computer Science and Engineering was established in the year 2008 with a sanctioned strength of 60 and the intake was increased to 120 in 2012. Computer science is the study of the theoretical foundations of information and computation, and of practical techniques for their implementation and application in computer systems. The aim of this department is to create quality computer professionals in the nation's march towards the digital age. The whole faculty team of Computer Science and Engineering Department is working with a sense of responsibility and dedication to excel and achieve success in this era of Computer Science. The Department is equipped with well-established computing Laboratories to offer training in Internet Technologies, Database Applications and Open Source Software. Apart from imparting conventional technical education and rich learning environment, emphasis is laid on co-curricular activities such as seminars, workshops, Guest Lectures, Technical quizzes and Paper presentations to prepare students for highly competitive job market. The department has signed for the campus agreement with Microsoft Corporation and also signed with IBM for Rational suite applications. Also the department aims at establishing strong relationship with the industry so as to bridge the gap between the academia and corporate sector. Also the department aims at cultivating qualities like leadership, teamwork, self-confidence, good communication skills among its students. Being a member of Velammal family, the department is committed to impart quality technical knowledge to meet real world challenges by

- Inviting eminent people from industry/institution
- Making students to participate in research & development
- Career plan programmes to enable the students to achieve their goal
- Advanced class room teaching aids-using Smart Board Classes, LCD Projectors, OHP etc
- Giving projects to students in their curriculum subjects in order to have in depth knowledge about the subject.



INSTITUTE VISION

TO BE A LEADER IN IMPARTING QUALITY TECHNICAL EDUCATION, RESEARCH & ENTERPRISING SKILLS IN PURSUIT OF PROFESSIONAL EXCELLENCE.

INSTITUTE MISSION

- **TO PROMOTE QUALITY EDUCATION & TECHNICAL SKILLS TO MEET THE INDUSTRY REQUIREMENTS.**
- **TO INCORPORATE TEAM WORK, LEADERSHIP SKILLS & LIFELONG LEARNING.**
- **TO FACILITATE CAREER DEVELOPMENT & HIGHER EDUCATION ASSISTANCE.**
- **TO ENCOURAGE INNOVATIVE IDEAS FOR RESEARCH & DEVELOPMENT AND ENTREPRENEURSHIP FOR SOCIETAL NEEDS.**
- **TO INCULCATE ETHICAL RESPONSIBILITY & HUMAN VALUES.**

VISION OF THE DEPARTMENT

TO CREATE SUCCESSFUL ENGINEERS WITH TECHNICAL COMPETENCY AND INNOVATIVE IDEAS IN THE FIELD OF COMPUTER SCIENCE AND ENGINEERING.

MISSION OF THE DEPARTMENT

- **TO ACHIEVE ACADEMIC EXCELLENCE THROUGH EFFECTIVE TEACHING-LEARNING PROCESS TO MEET THE DEMANDS OF THE INDUSTRY.**
- **TO EQUIP STUDENTS TO FACE THE CHALLENGES IN THE FIELD OF COMPUTER SCIENCE AND ENGINEERING AND PREPARE THEM AS RESPONSIBLE ENGINEERS WITH HUMAN VALUES.**
- **TO ENRICH STUDENTS WITH REQUIRED SKILLS FOR EMPLOYABILITY, ENTREPRENEURSHIP AND PURSUING HIGHER STUDIES.**
- **TO ENCOURAGE THE STUDENTS TO IMPLEMENT INNOVATIVE IDEAS FOR RESEARCH AND DEVELOPMENT.**

Program Outcomes (POs)

1. ENGINEERING KNOWLEDGE: APPLY THE KNOWLEDGE OF MATHEMATICS, SCIENCE, ENGINEERING FUNDAMENTALS, AND AN ENGINEERING SPECIALIZATION TO THE SOLUTION OF COMPLEX ENGINEERING PROBLEMS.

2. PROBLEM ANALYSIS: IDENTIFY, FORMULATE, REVIEW RESEARCH LITERATURE, AND ANALYZE COMPLEX ENGINEERING PROBLEMS REACHING SUBSTANTIATED CONCLUSIONS USING FIRST PRINCIPLES OF MATHEMATICS, NATURAL SCIENCES, AND ENGINEERING SCIENCES.

3. DESIGN/DEVELOPMENT OF SOLUTIONS: 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. CONSIDERATIONS.

4. CONDUCT INVESTIGATIONS OF COMPLEX PROBLEMS: 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.

5. MODERN TOOL USAGE: CREATE, SELECT, AND APPLY APPROPRIATE TECHNIQUES, RESOURCES, AND MODERN ENGINEERING AND IT TOOLS INCLUDING PREDICTION AND MODELING TO COMPLEX ENGINEERING ACTIVITIES WITH AN UNDERSTANDING OF THE LIMITATIONS.

6. THE ENGINEER AND SOCIETY: 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. PROGRAM OUTCOMES (POS)

PROGRAM OUTCOMES (POS)

Program Outcomes (POs)

7. ENVIRONMENT AND SUSTAINABILITY: UNDERSTAND THE IMPACT OF THE PROFESSIONAL ENGINEERING SOLUTIONS IN SOCIETAL AND ENVIRONMENTAL CONTEXTS, AND DEMONSTRATE THE KNOWLEDGE OF, AND NEED FOR SUSTAINABLE DEVELOPMENT.

8. ETHICS: APPLY ETHICAL PRINCIPLES AND COMMIT TO PROFESSIONAL ETHICS AND RESPONSIBILITIES AND NORMS OF THE ENGINEERING PRACTICE.

9. INDIVIDUAL AND TEAM WORK: FUNCTION EFFECTIVELY AS AN INDIVIDUAL, AND AS A MEMBER OR LEADER IN DIVERSE TEAMS, AND IN MULTIDISCIPLINARY SETTINGS.

10. COMMUNICATION: COMMUNICATE EFFECTIVELY ON COMPLEX ENGINEERING ACTIVITIES WITH THE ENGINEERING COMMUNITY AND WITH SOCIETY AT LARGE, SUCH AS, BEING 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.

11. PROJECT MANAGEMENT AND FINANCE: 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.

**12. LIFE-LONG LEARNING: RECOGNIZE THE NEED FOR, AND HAVE THE PREPARATION AND ABILITY TO ENGAGE INDEPENDENT AND LIFE-LONG LEARNING
IN THE BROADEST CONTEXT OF TECHNOLOGICAL CHANGE**

PROGRAM EDUCATIONAL OBJECTIVES (PEO'S)

GRADUATES OF COMPUTER SCIENCE AND ENGINEERING PROGRAM WILL

- 1.APPLY THEIR TECHNICAL COMPETENCE IN COMPUTER SCIENCE TO SOLVE REAL WORLD PROBLEMS, WITH TECHNICAL AND PEOPLE LEADERSHIP.**
- 2.CONDUCT CUTTING EDGE RESEARCH AND DEVELOP SOLUTIONS ON PROBLEMS OF SOCIAL RELEVANCE.**
- 3.WORK IN A BUSINESS ENVIRONMENT, EXHIBITING TEAM SKILLS, WORK ETHICS, ADAPTABILITY AND LIFELONG LEARNING.**

PROGRAMME SPECIFIC OUTCOMES (PSO'S)

GRADUATES OF BACHELOR OF COMPUTER SCIENCE AND ENGINEERING WILL HAVE THE ABILITY AND CAPABILITY TO

PSO1: APPLY THE ACQUIRED KNOWLEDGE OF MATHEMATICS AND COMPUTER SCIENCE ENGINEERING FUNDAMENTALS TO ANALYSE, DESIGN AND DEVELOP SOFTWARE PRODUCTS OR PROJECTS.

PSO2: IDENTIFY AND APPLY APPROPRIATE LATEST SOFTWARE TOOLS TO PROVIDE SOLUTIONS FOR COMPLEX ENGINEERING PROBLEMS.

EDITORIAL BOARD



s.0 n	Magazine	2024-2025
1	Chief Editor	Kishankanth D S (IV Year) Dhivya Lakshmi B (IV Year)
2	Student Editorial Board	Harshitha Reddy (IV Year) Vijaya harshitha (IV Year) Fanny Prajeetha (IV Year) Nawin .M.S (IV Year) Nitha Esther (IV Year)
3	Staff Coordinator	Dr. V.P Gladis Pushparthi - HOD CSE Mr. A.Anbumani Assistant Professor



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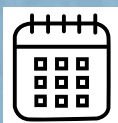
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GENERATIVE AI BY ADOBE FOR CLASSROOM AND BUSINESSES



13.09.2024



velammal institute of
technology

EVENT SUMMARY

THE DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING ORGANIZED A ONE-DAY ONLINE WORKSHOP ON “GENERATIVE AI BY ADOBE FOR CLASSROOM AND BUSINESSES” ON 13.09.2024. THE WORKSHOP WAS CONDUCTED FOR IV YEAR CSE A AND B STUDENTS, WITH A TOTAL OF 122 PARTICIPANTS. THE SESSION WAS LED BY DR.PRERNA AJMANI, SENIOR ASSISTANT PROFESSOR, VIVEKANANDA INSTITUTE OF PROFESSIONAL STUDIES TC, NEW DELHI. THE OBJECTIVE OF THE WORKSHOP WAS TO INTRODUCE STUDENTS TO GENERATIVE AI TECHNOLOGIES DEVELOPED BY ADOBE AND EXPLORE THEIR PRACTICAL APPLICATIONS IN ACADEMIC AND BUSINESS CONTEXTS. THIS INITIATIVE IS PART OF THE DEPARTMENT’S EFFORTS TO ENHANCE STUDENTS’ EXPOSURE TO CUTTING-EDGE TECHNOLOGIES AND IMPROVE THEIR INDUSTRY READINESS.

Department of Computer Science and Engineering

Organizing One Day Workshop on

"Generative AI by Adobe for classroom or Businesses"



Resource Person



Date : 13-09-2024

Time : 1:30 pm to 3:15 pm

Venue: 1st Floor Seminar Hall

Dr.Perna Ajmani

Sr.Assistant Prof
Vivekananda Institute of Professional Studies TC
Delhi



Dr.V.P.Gladis Pushparathi
HoD (CSE)

Dr.S.Soundararajan
Vice Principal

Dr.N.Balaji
Principal



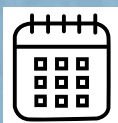
Thatchoor, Tamil Nadu, India
Main Block, NH16, Thatchoor, Tamil Nadu 601204, India
Lat 13.29475°
Long 80.149872°
13/09/24 02:07 PM GMT +05:30

Google

GPS Map Camera



INDUSTRIAL VISIT



16.09.2024
&
18.09.2024



Tidel Park

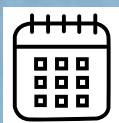
EVENT SUMMARY

THE DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING ORGANIZED AN INDUSTRIAL VISIT TO TIDEL PARK, THARAMANI, CHENNAI ON 16.09.2024 AND 18.09.2024. THE VISIT WAS ARRANGED FOR III YEAR CSE STUDENTS FROM SECTIONS A, B, AND C, WITH A TOTAL OF 166 PARTICIPANTS. TIDEL PARK, BEING ONE OF THE LARGEST IT PARKS IN ASIA, PROVIDED STUDENTS WITH VALUABLE EXPOSURE TO REAL-WORLD IT OPERATIONS, CORPORATE ENVIRONMENTS, AND TECHNOLOGICAL INFRASTRUCTURE. THE VISIT AIMED TO BRIDGE THE GAP BETWEEN ACADEMIC LEARNING AND INDUSTRY PRACTICES, ENHANCING STUDENTS' UNDERSTANDING OF THE IT INDUSTRY'S WORK CULTURE, EMERGING TECHNOLOGIES, AND CAREER OPPORTUNITIES. THIS INITIATIVE ALIGNS WITH THE DEPARTMENT'S COMMITMENT TO PROMOTING EXPERIENTIAL LEARNING AND PREPARING STUDENTS FOR FUTURE PROFESSIONAL ROLES.





MOU



25.09.2024



velammal institute of
technology

EVENT SUMMARY

THE DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING ORGANIZED THE SIGNING OF A MEMORANDUM OF UNDERSTANDING (MOU) WITH TALENT FACTORI PRIVATE LIMITED ON 25.09.2024. THIS COLLABORATION INVOLVED THE ACTIVE PARTICIPATION OF CSE FACULTY MEMBERS AND IS AIMED AT FOSTERING MUTUAL COOPERATION IN AREAS SUCH AS SKILL DEVELOPMENT, INDUSTRY-BASED TRAINING, STUDENT INTERNSHIPS, AND RESEARCH OPPORTUNITIES. THE MOU SIGNIFIES A STRATEGIC STEP TOWARD STRENGTHENING INDUSTRY-ACADEMIA COLLABORATION, ENHANCING FACULTY EXPOSURE TO EMERGING TECHNOLOGIES, AND PROVIDING STUDENTS WITH ACCESS TO PRACTICAL LEARNING PLATFORMS. THIS PARTNERSHIP IS EXPECTED TO SUPPORT THE DEPARTMENT'S MISSION OF EQUIPPING STUDENTS WITH INDUSTRY-RELEVANT SKILLS AND PROMOTING INNOVATION-DRIVEN EDUCATION.



VELAMMAL

INSTITUTE OF TECHNOLOGY

Approved by AICTE New Delhi & Affiliated to Anna University Chennai

CSE, ECE, EEE, IT, HODI Accredited by NBA & NAAC

"Velammal Knowledge Park", Chennai - Kothurda Highway, Ponnai - 601204.



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Welcomes you all !

for the signing ceremony



Memorandum Of Understanding (MoU)

between

TALENT FACTOR PRIVATE LIMITED

and

Velammal Institute of Technology

to promote academic cooperation and exchange

Date 25-09-2024

Venue

Time 09:00 AM to 10:00 AM

Board Room

Dr. V.P. Gladis Pushpanathi

HoD / CSE

Dr. S. Sundararajan

Vice-Principal

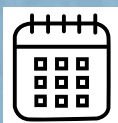
Dr. M. Balaji

Principal





RED HAT TECHNICAL SEMINAR



27.09.2024



velammal institute of technology

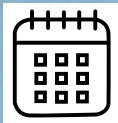
EVENT SUMMARY

THE DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING ORGANIZED A RED HAT TECHNICAL SEMINAR ON 27.09.2024 FOR II YEAR CSE STUDENTS FROM SECTIONS A, B, C, AND D, WITH A TOTAL OF 239 PARTICIPANTS. THE SEMINAR WAS DELIVERED BY MR. SRIDHAR JAYARAMAN FROM GLOBAL LEARNING SERVICES, RED HAT. THE SESSION FOCUSED ON INTRODUCING STUDENTS TO OPEN-SOURCE TECHNOLOGIES, LINUX-BASED SYSTEMS, AND CLOUD INFRASTRUCTURE, HIGHLIGHTING RED HAT'S ROLE IN ENTERPRISE IT SOLUTIONS. THE SEMINAR AIMED TO BUILD A STRONG FOUNDATIONAL UNDERSTANDING OF RED HAT TECHNOLOGIES, FOSTER STUDENT INTEREST IN CERTIFICATION PROGRAMS, AND ALIGN ACADEMIC LEARNING WITH INDUSTRY STANDARDS. THIS INITIATIVE SUPPORTS THE DEPARTMENT'S GOAL OF EQUIPPING STUDENTS WITH PRACTICAL SKILLS AND AWARENESS OF GLOBAL TECHNOLOGY PLATFORMS.





MOCK INTERVIEW



28.09.2024



velammal institute of technology

EVENT SUMMARY

THE DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING ORGANIZED A MOCK INTERVIEW SESSION ON 28.09.2024 FOR IV YEAR STUDENTS. THE SESSION WAS CONDUCTED BY ALUMNI OF VELAMMAL INSTITUTE OF TECHNOLOGY, WHO ARE CURRENTLY PLACED IN REPUTED COMPANIES. THE OBJECTIVE OF THE MOCK INTERVIEW WAS TO SIMULATE REAL PLACEMENT SCENARIOS, HELPING STUDENTS GAIN CONFIDENCE, IMPROVE COMMUNICATION SKILLS, AND RECEIVE CONSTRUCTIVE FEEDBACK ON THEIR TECHNICAL AND HR INTERVIEW PERFORMANCE. THE ALUMNI SHARED VALUABLE INSIGHTS FROM THEIR OWN PLACEMENT EXPERIENCES, PROVIDING GUIDANCE ON CURRENT INDUSTRY EXPECTATIONS, RESUME PREPARATION, AND INTERVIEW STRATEGIES. THIS INITIATIVE AIMED TO ENHANCE THE PLACEMENT READINESS OF STUDENTS AND BRIDGE THE GAP BETWEEN ACADEMIC LEARNING AND CORPORATE EXPECTATIONS



VELAMMAL
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"Velammal Knowledge Park", Chennai - Kolkatta Highway, Porur - 600124



DEPARTMENT OF COMPUTER SCIENCE & ENGINEERING

Organizes

“ Mock Interview by Alumni “



Mr.K. Kamallesh
Automation engineer
Verizon



Mr.P. Mahadevan
Senior DevOps Engineer
Newgen Software



Mr.K. Salman Afroz
Senior Developer
Wipro



Mr.S. Sharvesh
Consultant
CDW Indi



Mr. Dinesh Kumar
Senior Software Engineer
Zuci systems



Mr.S. Karthick
Systems Engineer
TCS



Ms.S. Mary Annie
Software Developer
Sify technologies



Mr.B. Udhay Kumar
Member technical staff
ZOHO



Ms.E. Aishwarya
Analyst
Deloitte

Target Audience: IV-CSE-Students

Batch: 2021-2025

Venue: Placement Cell

HOD

Dr.V.P.Gladis Pushparathi

VICE PRINCIPAL

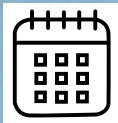
Dr.S.Soundararajan

PRINCIPAL

Dr.N.Balaji



MoU



07.10.2024

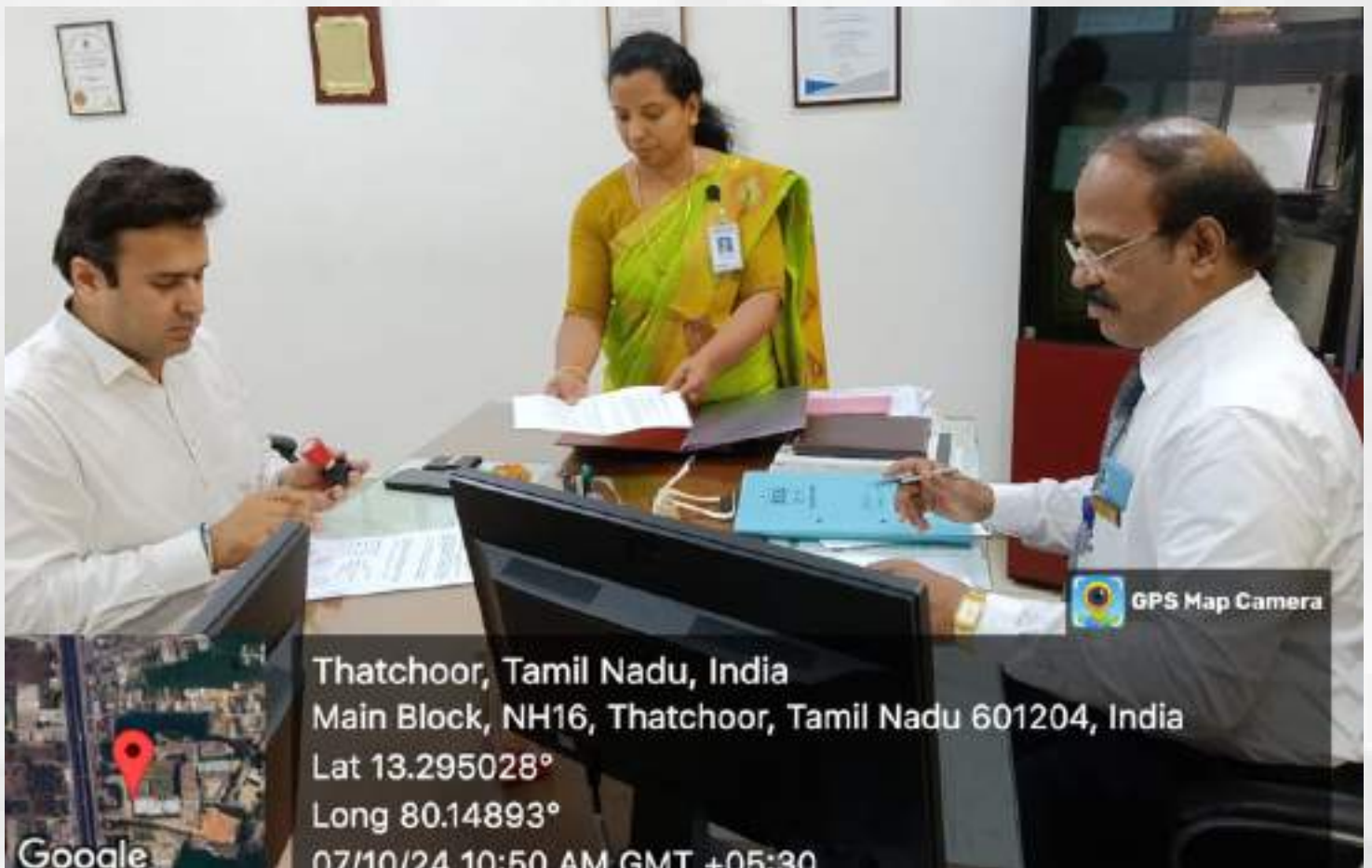
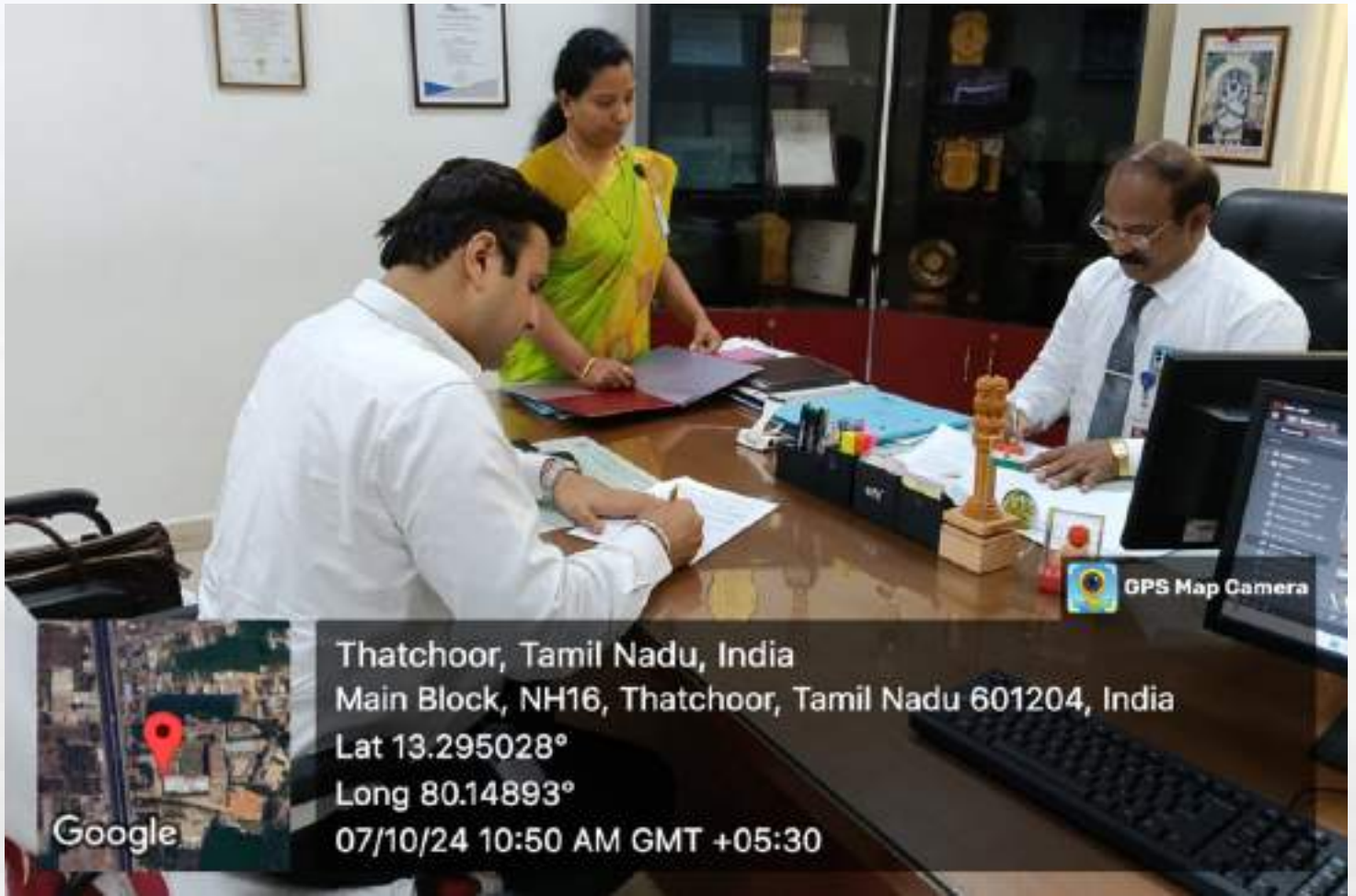


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EVENT SUMMARY

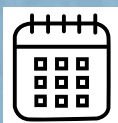
THE DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING ORGANIZED THE SIGNING OF A MEMORANDUM OF UNDERSTANDING (MoU) WITH AUDAZ VENTURES PVT. LTD. ON 07.10.2024.

THIS MoU INVOLVED CSE FACULTY MEMBERS AND AIMS TO PROMOTE COLLABORATION IN AREAS SUCH AS STUDENT INTERNSHIPS, INDUSTRY-BASED PROJECTS, FACULTY DEVELOPMENT, AND RESEARCH PARTNERSHIPS. THE AGREEMENT SEEKS TO PROVIDE STUDENTS WITH EXPOSURE TO ENTREPRENEURIAL VENTURES, START-UP ECOSYSTEMS, AND INNOVATIVE BUSINESS MODELS, WHILE ALSO STRENGTHENING THE DEPARTMENT'S INDUSTRY TIES. THIS PARTNERSHIP WILL OFFER FACULTY MEMBERS THE OPPORTUNITY TO ENGAGE IN INDUSTRY-RELEVANT RESEARCH, FACILITATING THE INTEGRATION OF PRACTICAL, REAL-WORLD KNOWLEDGE INTO THE CURRICULUM. THE MoU IS IN LINE WITH THE DEPARTMENT'S OBJECTIVES OF ENHANCING ACADEMIC-INDUSTRY COLLABORATION AND FOSTERING INNOVATIVE THINKING AMONG STUDENTS AND FACULTY.





ATAL FDP



14.10.2024



velammal institute of technology

EVENT SUMMARY

THE DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING ORGANIZED AN AICTE SPONSORED ATAL FACULTY DEVELOPMENT PROGRAMME (FDP) ON THE TOPIC "ADVANCED RESEARCH TRENDS FOR NEW BUSINESS/STARTUPS". THE PROGRAMME STARTS BETWEEN 14.10.2024 AND FROM 11.11.2024 TO 15.11.2024. THE PROGRAMME WAS ATTENDED BY BOTH INTERNAL AND EXTERNAL FACULTY MEMBERS. THE FDP AIMED TO PROVIDE PARTICIPANTS WITH IN-DEPTH KNOWLEDGE ON ADVANCED RESEARCH TRENDS, ENTREPRENEURSHIP, AND START-UP INNOVATIONS, WITH A PARTICULAR FOCUS ON BUSINESS INCUBATION AND INDUSTRY-SPECIFIC RESEARCH TRENDS. THE PROGRAMME INCLUDED INTERACTIVE SESSIONS WITH EXPERTS FROM DIVERSE FIELDS, INCLUDING ENTREPRENEURSHIP, INCUBATION, AND GOVERNMENT INITIATIVES, HELPING PARTICIPANTS BETTER UNDERSTAND THE PROCESS OF NURTURING AND GROWING START-UP VENTURES. THIS INITIATIVE ALIGNS WITH THE DEPARTMENT'S COMMITMENT TO PROMOTING INNOVATION, ENTREPRENEURIAL THINKING, AND RESEARCH COLLABORATION, CONTRIBUTING TO THE ACADEMIC AND PROFESSIONAL DEVELOPMENT OF FACULTY MEMBERS





VELAMMAL
INSTITUTE OF TECHNOLOGY

DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

ATAL FACULTY DEVELOPMENT PROGRAM

DAY 4 - INDUSTRIAL VISIT

ON 13-11-2024

MSME OFFICE



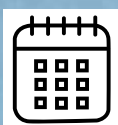


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INSTITUTE OF TECHNOLOGY
Chennai - Kolkatta Highway, Panchetti, Ponneri



INSTITUTION'S
INNOVATION
COUNCIL
(Ministry of HRD initiative)

IDEA HACKATHON 2024



24.11.2024



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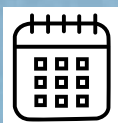
EVENT SUMMARY

THE DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING ORGANIZED THE IDEA HACKATHON 2024 ON 24.11.2024. THE EVENT WAS OPEN TO BOTH INTERNAL AND EXTERNAL COLLEGE STUDENTS, PROVIDING A PLATFORM FOR STUDENTS TO PRESENT THEIR INNOVATIVE IDEAS AND SOLUTIONS. THE HACKATHON WAS MENTORED BY MR. R. RANGARAJAN, EX-IAS, CA, CMA, AND ASSOCIATE DIRECTOR AT OFFICERS IAS ACADEMY, CHENNAI. THE PRIMARY OBJECTIVE OF THE EVENT WAS TO ENCOURAGE STUDENTS TO THINK CREATIVELY AND APPLY THEIR TECHNICAL SKILLS TO SOLVE REAL-WORLD PROBLEMS. STUDENTS PARTICIPATED IN TEAMS, WORKING ON IDEATION, PROTOTYPE DEVELOPMENT, AND SOLUTION PRESENTATION. THE HACKATHON ALSO SERVED AS AN OPPORTUNITY FOR STUDENTS TO INTERACT WITH INDUSTRY MENTORS AND GAIN INSIGHTS INTO THE ENTREPRENEURIAL PROCESS, PROBLEM-SOLVING APPROACHES, AND THE IMPORTANCE OF INNOVATION IN SHAPING FUTURE TECHNOLOGIES. THIS EVENT ALIGNS WITH THE DEPARTMENT'S GOAL OF PROMOTING CREATIVITY, ENTREPRENEURSHIP, AND COLLABORATIVE LEARNING AMONG STUDENTS.





MICROSOFT POWER BI DATA ANALYST ASSOCIATE FDP



25.11.2024
to
30.11.2024



velammal institute of technology

EVENT SUMMARY

THE DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING ORGANIZED A MICROSOFT POWER BI DATA ANALYST ASSOCIATE FACULTY DEVELOPMENT PROGRAMME (FDP) FROM 25.11.2024 TO 30.11.2024. THIS PROGRAMME WAS SPONSORED BY E & ICT ACADEMY AND WAS ATTENDED BY BOTH INTERNAL AND EXTERNAL FACULTY MEMBERS. THE FDP FOCUSED ON PROVIDING FACULTY WITH COMPREHENSIVE TRAINING IN USING MICROSOFT POWER BI FOR DATA ANALYSIS, VISUALIZATION, AND BUSINESS INTELLIGENCE. PARTICIPANTS WERE INTRODUCED TO THE CORE FEATURES OF POWER BI, INCLUDING DATA INTEGRATION, REPORT BUILDING, AND DASHBOARD CREATION, WHICH ARE CRITICAL FOR ANALYZING AND INTERPRETING COMPLEX DATASETS. THE TRAINING AIMED TO ENHANCE FACULTY MEMBERS' PROFICIENCY IN DATA ANALYTICS TOOLS, ENABLING THEM TO INTEGRATE THESE SKILLS INTO THEIR TEACHING AND RESEARCH ACTIVITIES, AND FOSTER A CULTURE OF DATA-DRIVEN DECISION-MAKING IN ACADEMIC ENVIRONMENTS. THIS INITIATIVE ALIGNS WITH THE DEPARTMENT'S GOAL OF EMPOWERING FACULTY MEMBERS WITH THE LATEST INDUSTRY-RELEVANT TOOLS AND KNOWLEDGE TO ENHANCE THEIR TEACHING EFFECTIVENESS AND RESEARCH CAPABILITIES.





VELAMMAL
INSTITUTE OF TECHNOLOGY
Convert... Challenges into ScienceChallenges



**VELAMMAL
KNOWLEDGE
PARK**
Creating the Future

Achievements

Leading Through Innovation, Defined by Excellence

Innovation That Inspires, Excellence That Endures

Charting a Path of Innovation & Growth



MANNEM HEMA SRI

CGPA-9.46

FIRST RANK



PROJECTS

INNOVATION BEGINS WHERE PROBLEMS
MEET CREATIVE SOLUTIONS

EVERY GREAT PROJECT STARTS WITH A SIMPLE IDEA

TECHNOLOGY IS BEST WHEN IT IMPROVES PEOPLE'S
LIVES.





DETECTION AND CLASSIFICATION OF SPINAL CORD STENOSIS USING DEEP LEARNING

Spinal stenosis is a common and often debilitating condition caused by the narrowing of spaces within the spine, which can lead to nerve compression and severe pain. Early and accurate diagnosis plays a crucial role in managing the disease and preventing its progression. However, manual diagnosis through medical imaging can be time-consuming, subjective, and prone to inconsistencies. In response to these challenges, Spinal Stenosis presents an intelligent, AI-powered solution designed to automate and improve the detection and classification of spinal stenosis using convolutional neural networks (CNNs). The core of this project lies in leveraging the power of CNNs a class of deep learning models specifically designed for image processing tasks to analyze spinal MRI or CT images. By training on a diverse dataset of annotated spinal images, the system learns to detect patterns and anomalies indicative of stenosis with high precision. Advanced CNN architectures, such as Google Net, Lenet, Manual Net are employed to optimize the model's performance, enabling it to differentiate between various types and severities of stenosis.

A key innovation of Spinal Stenosis is its seamless integration with the Django web framework, which provides a user-friendly interface for healthcare professionals. This integration allows users to upload medical images, view diagnostic results, and monitor model performance through an intuitive dashboard. Additionally, Django's robust backend facilitates efficient data management, secure user authentication, and real-time updates, streamlining the workflow for both clinicians and data scientists. Spinal Stenosis not only aims to assist radiologists and medical practitioners in making more accurate decisions but also significantly reduces the time and effort required for diagnosis.

BENSIHA A -113321104008

JAYASRI M -113321104034

KATHIYAYENI S -113321104041

NAGALAKSHMI M -113321104064



SENTIMENTAL ANALYSIS OF CUSTOMER PRODUCT REVIEWS USING MACHINE LEARNING AND LEXICON

This project focuses on Sentiment Analysis, a significant branch of Natural Language Processing (NLP) and text analytics, aimed at interpreting and classifying the emotional tone behind user-generated content. Also known as Opinion Mining, sentiment analysis identifies, extracts, and quantifies affective states and subjective opinions from textual data. In this work, we concentrate on product-based sentiment analysis, particularly analyzing mobile phone reviews to determine whether the expressed sentiment is positive, negative, or neutral. Models such as K-Nearest Neighbors, Random Forest Regression, and Multinomial Naive Bayes are trained on a labeled dataset of scraped reviews from top company websites. Alongside machine learning, a sentiment lexicon is used to detect opinion-bearing words. Each sentiment word is assigned a predefined polarity score, and sentiment calculation is carried out by computing a weighted sentiment score based on word frequency and polarity system supports real-time input through a web interface, where user-submitted reviews are analyzed live. Text preprocessing steps such as tokenization, stop-word removal, and stemming are applied classification, while key product features are extracted using NLP technique valuable insights. The methodology begins with the collection of product reviews from major e-commerce platforms, followed by preprocessing steps including tokenization, stop-word removal, stemming, and feature extraction through methods such as TF-IDF and Word2Vec. The Random Forest classifier is then trained to identify sentiment polarity and evaluated using performance metrics such as accuracy, precision, recall, and F1-score. This project highlights the practical effectiveness of the Random Forest algorithm insentiment analysis and its value in enabling informed decision-making in the digital marketplace.

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BLOCKCHAIN BASED KYC MODEL FOR CREDIT ALLOCATION IN BANKING

Traditional Know Your Customer (KYC) processes in the banking sector are often plagued by inefficiencies, redundancy, and vulnerability to fraudulent activities. Customers are frequently required to submit the same verification documents to multiple financial institutions, leading to a waste of time and resources. Furthermore, the centralized nature of conventional KYC systems creates a single point of failure, making sensitive customer data susceptible to breaches and unauthorized access.

This paper introduces a novel solution that integrates blockchain technology with facial recognition, implemented using MATLAB, to overcome these persistent challenges. Blockchain technology offers a secure, immutable, and decentralized ledger for storing encrypted KYC data. It ensures that once data is verified and uploaded, it cannot be altered or tampered with, thus establishing a high level of trust and transparency among banks, regulatory bodies, and customers.

Facial recognition, implemented via MATLAB's advanced image processing capabilities, serves as a robust biometric authentication mechanism. It analyzes unique facial features to accurately verify a user's identity, thereby significantly reducing the risk of identity fraud, impersonation, or misuse of personal data. The integration of biometric authentication with blockchain storage provides a dual layer of security and reliability. With this system in place, banks no longer need to perform repetitive verification processes for the same individual. Instead, they can access verified KYC profiles directly from the blockchain network, which is shared and trusted across institutions. This reduces onboarding time, minimizes operational overhead, and ensures that credit allocation decisions are based on trustworthy and up-to-date identity data. In addition to improving efficiency and reducing compliance costs, this integrated approach also enhances the overall user experience and accelerates loan approvals. It adheres to regulatory requirements while providing a scalable, transparent, and secure framework for identity management.

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ENHANCING BRAIN TUMOR DIAGNOSIS USING CNN ARCHITECTURES

Brain tumor diagnosis is a critical area in medical imaging, and the use of Convolutional Neural Networks (CNNs) with TensorFlow has shown significant promise in enhancing the accuracy and efficiency of this process. CNNs, known for their powerful feature extraction and classification capabilities, can automatically identify complex patterns in medical images that are indicative of brain tumors. By leveraging TensorFlow, an open-source machine learning framework, these CNN architectures can be trained on vast datasets of MRI scans, learning to distinguish between different types of brain tumors with high precision. This approach not only reduces the reliance on radiologists' manual interpretation but also accelerates the diagnostic process, leading to quicker and potentially life-saving treatment decisions. To further enhance model robustness, preprocessing techniques such as normalization, resizing, and augmentation are applied to MRI data before training. Advanced architectures like VGG and LeNet are explored to determine the most suitable model for tumor classification. The system undergoes rigorous evaluation using metrics like accuracy, precision, recall, and F1-score to ensure reliability. Real-time classification functionality is achieved by integrating the trained model into a Django-based web interface. This allows clinicians to upload scans and receive instant diagnostic predictions. Additionally, the model's performance is optimized through hyperparameter tuning and cross-validation techniques. The project demonstrates how combining deep learning with clinical imaging can streamline medical workflows and reduce diagnostic errors. The integration of CNNs with TensorFlow in brain tumor diagnosis exemplifies the transformative impact of artificial intelligence in healthcare, offering a robust, scalable, and efficient solution for early detection and improved patient outcomes.

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LIVER DISEASE STAGE PREDICTION USING MACHINE LEARNING AND DEEP LEARNING

Liver disease is a significant global health concern, requiring timely diagnosis and accurate stage prediction to improve patient outcomes and guide effective treatment strategies. In the evolving landscape of healthcare, the application of machine learning (ML) and deep learning (DL) has emerged as a transformative approach to advancing disease classification and prediction. This study focuses on the development of a hybrid predictive framework combining both ML and DL models to classify liver disease and accurately predict its severity stages using clinical patient data. Leveraging a comprehensive dataset comprising diverse clinical parameters and patient histories, this research investigates the performance of several ML algorithms, including K-Nearest Neighbors (KNN), Extra Trees Classifier, and CatBoost, alongside deep learning models such as a manually designed neural network and a ShuffleNet-based architecture. These models are meticulously trained and evaluated to detect complex patterns and relationships within the data that may indicate liver disease progression. Robust data preprocessing techniques, including handling missing values and feature normalization, are employed to ensure data quality, while visualization tools are used to analyse feature correlations and improve interpretability. The models are assessed using standard performance metrics-accuracy, precision, recall, and F1-score-to evaluate their predictive power and reliability. The results demonstrate the effectiveness of combining ML and DL methods for early detection and precise stage classification of liver disease.

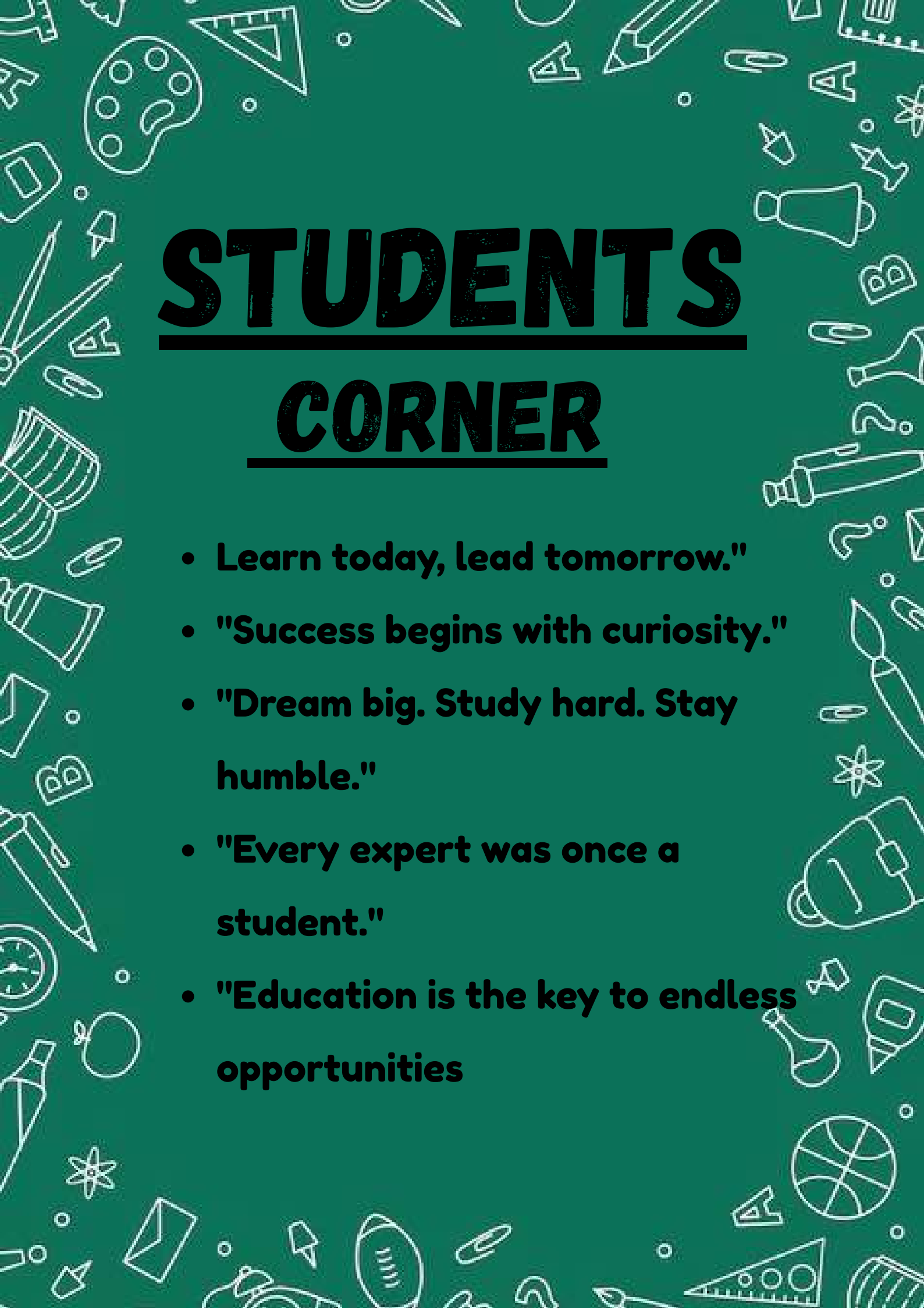
By integrating these technologies, the study aims to enhance diagnostic accuracy, facilitate personalized treatment planning, and ultimately support healthcare providers in delivering data-driven, patient-centric care.

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VADDIBOINA PATTABHIRAMI REDDY - 113321104105



STUDENTS

CORNER

- **Learn today, lead tomorrow."**
- **"Success begins with curiosity."**
- **"Dream big. Study hard. Stay humble."**
- **"Every expert was once a student."**
- **"Education is the key to endless opportunities"**

Poetry.

நிகழ்காலம்

கடந்த காலம் ஒரு காகிதம்,
எதிர்காலம் ஒரு ரகசியம்,
கையில் இருக்கும் இந்த நொடி தான்
நீ வாழ வேண்டிய நிஜம்!
மகிழ்ச்சியாய் கடந்து செல்!

— NITHA ESTHER
III YEAR

The Empty Chair

*A cup of tea grows slowly cold,
beside the book we never read.
The silence echoes in the room,
with all the words we left unsaid.*

— NAWIN MS
III YEAR

Art Works



— ART DONE BY

**NITHA ESTHER
III YEAR**



— ART DONE BY

**GNANESH REDDY Y
II YEAR**



— ART DONE BY
FANNY PRAJEETHA
IV YEAR



— ART DONE BY
ANAND M
IV YEAR

STUDENTS CORNER

1.	13.03.2025	TEXUS'25	SRM	THUVISHA DG	Participated
2.	17.03.2025	Tezas 2K25	R.M.K.Engineering College	Nitha Esther	Participated
3.	28.02.2025	Kurukshetra 2025 - Project Expo	Veltech Rangarajan	N.G.Vennila	Participated
4.	28.02.2025	Kurukshetra 2025 - Project Expo	Veltech Rangarajan	Vadathala Chandhana	Participated
5.	28.02.2025	Kurukshetra 2025 - Project Expo	Veltech Rangarajan	Unnam Tejaswini	Participated
6.	25.02.2025	SRISHTI-2025 - Hackathon	SAINTGITS-kerala	Pravin Sai M	Participated
7.	25.02.2025	SRISHTI-2025 - Hackathon	SAINTGITS-kerala	Mugilan M	Participated
8.	25.02.2025	SRISHTI-2025 - Hackathon	SAINTGITS-kerala	Sugan RAJ M	Participated
9.	25.02.2025	SRISHTI-2025 - Hackathon	SAINTGITS-kerala	Anuakshaya P	Participated
10.	25.02.2025	SRISHTI-2025 - Hackathon	SAINTGITS-kerala	Sandhya T	Participated
11.	25.02.2025	SRISHTI-2025 - Hackathon	SAINTGITS-kerala	Priyanka S	Participated
12.	25.02.2025	SRISHTI-2025 - Hackathon	SAINTGITS-kerala	Sushanth	Participated
13.	25.02.2025	SRISHTI-2025 - Hackathon	SAINTGITS-kerala	Puneeth	Participated
14.	25.02.2025	SRISHTI-2025 - Hackathon	SAINTGITS-kerala	Abilash	Participated

STUDENTS CORNER

15	04.03.2025	AES-TECH'2025	SRM	GOKUL L	PARTICIPANT
16	04.03.2025	AES-TECH'2025	SRM	GOKUL L	PARTICIPANT
17	04.03.2025	AES-TECH'2025	SRM	ELANGO C	PARTICIPANT
18	11.03.2025	MINNAL'25	SIMATS	MOHAMMED GOUSE ASHFAQ	PARTICIPANT
19	11.03.2025	MINNNAL'25	SIMATS	GIRIDHAR P	PARTICIPANT
20	12.09.2025	TECHCAUCUS'2024	SIMATS	JAYASHREE D	PARTICIPANT
21	12.09.2025	TECHCAUCUS'2024	SIMATS	THUVISHA DG	PARTICIPANT
22	28.03.2025	TEXUS'25	SRM	THUVISHA DG	PARTICIPANT
23	13.09.2024	DATATRIX'24	SRM	GAJRA DIVYA	PARTICIPANT
24	13.09.2024	DATATRIX'24	SRM	BOLLENI GEETHU NIHARIKA	PARTICIPANT
25	13.09.2024	DATATRIX'24	SRM	CHINTHAPATLA AKSHAYA	PARTICIPANT
26	12.09.2024	TECHCAUCUS'2024	SIMATS	REKHA M	PARTICIPANT
27	28.03.2025	TEXUS'25	SRM	LAKSHANIKAA P	PARTICIPANT
28	12.09.2024	TECHCAUCUS'2024	SIMATS	LAKSHANIKAA P	PARTICIPANT

STUDENTS CORNER

28.	28.03.2025	TEXUS'25	SRM	JAYASHREE D	PARTICIPANT
29.	31.08.2024	JETMECH-CIVCON24	ST.JOSEPH'S COLLEGE OF ENGINEERING	REKHA M	PARTICIPANT
30.	11.03.2025	MINNNAL'25	SIMATS	PRIYA A	PARTICIPANT
31.	28.03.2025	TEXUS'25	SRM	REKHA M	PARTICIPANT
32.	11.03.2025	MINNNAL'25	SIMATS	SRI BA R	PARTICIPANT
33.	13.09.2024	DATATRIX'24	SRM	PARVATHAREDDY SAI SINDHU SRI	PARTICIPANT
34.	11.03.2025	MINNNAL'25	SIMATS	KESHAVARDHINI V	PARTICIPANT
35.	13.09.2024	DATATRIX'24	SRM	SRI BA R	PARTICIPANT
36.	04.03.2025	AES-TECH'2025	SRM	GUNJI SUPRAVALLIKA	PARTICIPANT
37.	22.03.2025	IGNITE'25	SRM	HAFSA AHAMED H	PARTICIPANT
38.	13.09.2024	DATATRIX'24	SRM	HAFSA AHAMED H	PARTICIPANT
39.	04.03.2025	AES-TECH'2025	SRM	DUDALA AKHILA	PARTICIPANT
40.	13.09.2024	DATATRIX'24	SRM	SHAMITHA ELANGO VAN	PARTICIPANT
41.	13.09.2024	DATATRIX'24	SRM	SHARMILA SURESH	PARTICIPANT

STUDENTS CORNER

43.	22.03.2025	IGNITE'25	SRM	SHARAMILA SURESH	PARTICIPANT
44.	22.03.2025	IGNITE'25	SRM	YUVARANI P	PARTICIPANT
45.	03.03.2025	TEXUS'25	SRM	YAMINI R	PARTICIPANT
46.	03.03.2025	TEXUS'25	SRM	KANTE NIKITHA	PARTICIPANT
47.	04.03.2025	AES-TECH'2025	SRM	HIRTHIK KUMAR R	PARTICIPANT
48.	03.03.2025	TEXUS'25	SRM	RITHIKA G	PARTICIPANT
49.	03.03.2025	TEXUS'25	SRM	SHARVINA ROSELINE D	PARTICIPANT
50.	03.03.2025	TEXUS'25	SRM	ANAND M	PARTICIPANT
51.	04.03.2025	AES-TECH'2025	SRM	PAVINA P	PARTICIPANT
52.	25.03.2025	SILICON'2K25	SATHYABAMA	GOPINATH M	PARTICIPANT
53.	05.04.2025	CYBERPUNK	AGNI	GOPINATH M	PARTICIPANT
54.	23.01.2025	INNOVATIVE MINDS GENZ PRODUCT AND IDEA COMPETITION'25	SIMATS	HEMANTH M	PARTICIPANT
55.	23.01.2025	INNOVATIVE MINDS GENZ PRODUCT AND IDEA COMPETITION'25	SIMATS	ARYA K	PARTICIPANT
56.	23.01.2025	INNOVATIVE MINDS GENZ PRODUCT AND IDEA COMPETITION'25	SIMATS	NAWIN MS	PARTICIPANT

STUDENTS CORNER

57.	03.03.2025	TEXUS'25	SRM	JOTHI PRIYA S	PARTICIPANT
58.	05.04.2025	CYBERPUNK	AGNI	HARIPRASATH B	PARTICIPANT
59.	22.03.2025	NCAT	NCAT	KAILASH GOWTHAM U	PARTICIPANT
60.	05.04.2025	CYBERPUNK	AGNI	KAILASH GOWTHAM U	PARTICIPANT
61.	27.03.2025	PRAVESHA'2K25	VELS	DIVYA P	PARTICIPANT
62.	27.03.2025	PRAVESHA'2K25	VELS	SAKTHI S	PARTICIPANT
63.	03.03.2025	TEXUS'25	SRM	JERSIAH LOIS J	PARTICIPANT
64.	04.03.2025	AES-TECH'2025	SRM	PONMIKA V	PARTICIPANT
65.	04.03.2025	AES-TECH'2025	SRM	ABIMATHY N	PARTICIPANT
66.	03.03.2025	TEXUS'25	SRM	YAMINI P	PARTICIPANT
67.	03.03.2025	TEXUS'25	SRM	THARUNIKA M	PARTICIPANT
68.	03.03.2025	TEXUS'25	SRM	SUSHMITHA D	PARTICIPANT
69.	03.03.2025	TEXUS'25	SRM	SRUTHI RANJANI J	PARTICIPANT
70.	11.03.2025	MINNNAL'25	SIMATS	SANGANA LAHARI	PARTICIPANT

THANK YOU

