



DAYANANDA SAGAR
UNIVERSITY

STUDENT ACHIEVEMENTS



STUDENT ACHIEVEMENTS



Mr. Eeshaan U Bhat (ENG22CS0539), student of 4th Semester CSE Department and team won 2nd prize worth 1.5k in Decipher event held at DSCE on 13th July 2024.



Mrs. HARSHITHA A N (ENG22CS0068), 5th semester student, Department of CSE, has participated in a One Day Workshop on "Python-Django" on 27th July 2024, and 5 days' workshop on "Data analysis with Power BI and Rapid Miner" on 10th August 2024, organized by Department of Computer Science & Engineering, School of Engineering, Dayananda Sagar University, Harohalli.



STUDENT ACHIEVEMENTS

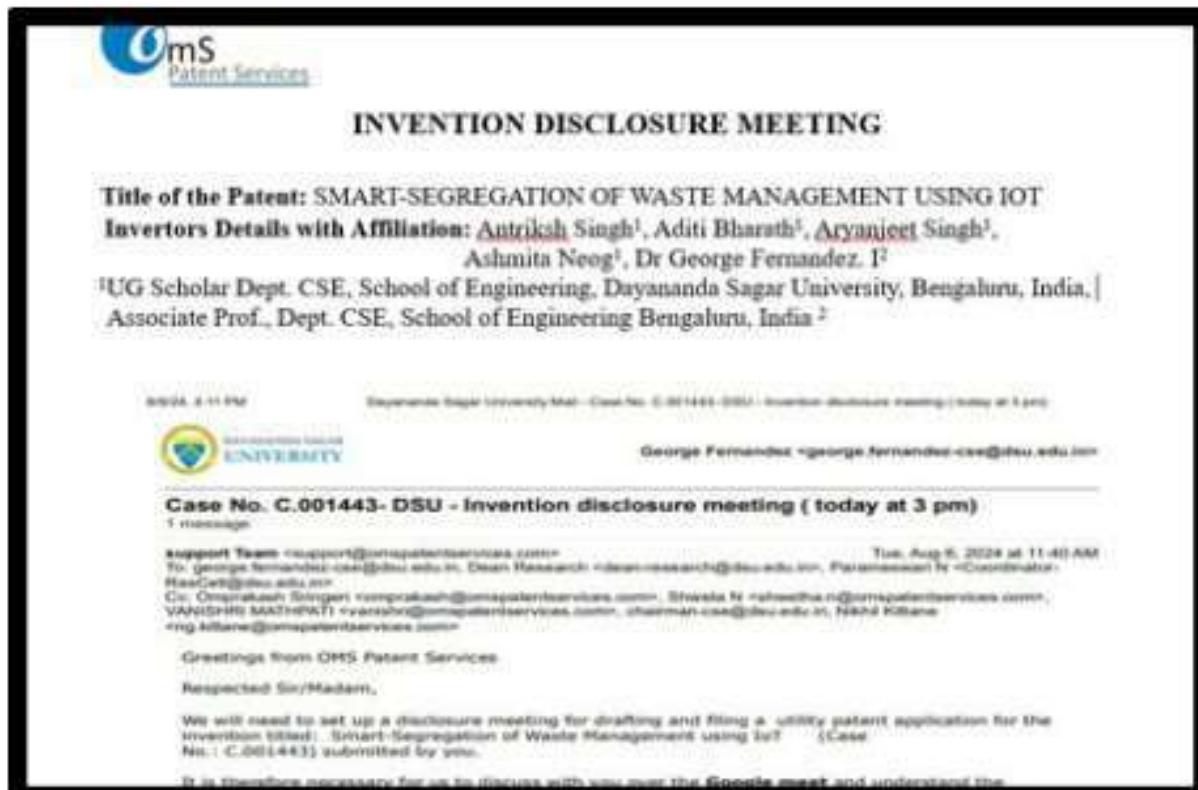


Mr. Ayyavaraiah M (ENG17PPCS13), Research Scholar, Department of Computer Science and Engineering, under the guidance of Dr Bondu Venkateswarlu, completed his Ph.D. Defense VIVA-VOCE entitled "Predictive Analytics for Sar-Cov19 Incidence, Disease Severity, and Patient Mortality Using Machine Learning," on August 10th, 2024, Lecture Hall 3, A Block, SOE, DSU, Harohalli, Bangalore.



Two teams of Final year student's batches from Department of Computer Science and Engineering under the guidance of Dr Basavaraj Hiremath and Prof Nandini K, participated in the 47th state level KSCST competitions at Sharanbasva University Kalaburagi on 9th and 10th of August 2024.

STUDENT ACHIEVEMENTS



Antriksh Singh, Aditi Bharath, Aryanjeet Singh, Ashmita Neog, UG Scholars and Dr George Fernandez I, Associate Professor, Dept. CSE, School of Engineering, Dayananda Sagar University, Bengaluru, India, filed a patent with the title “SMART-SEGREGATION OF WASTE MANAGEMENT USING IOT” and the applicant name “Dayananda Sagar University” on 6th of August 2024.

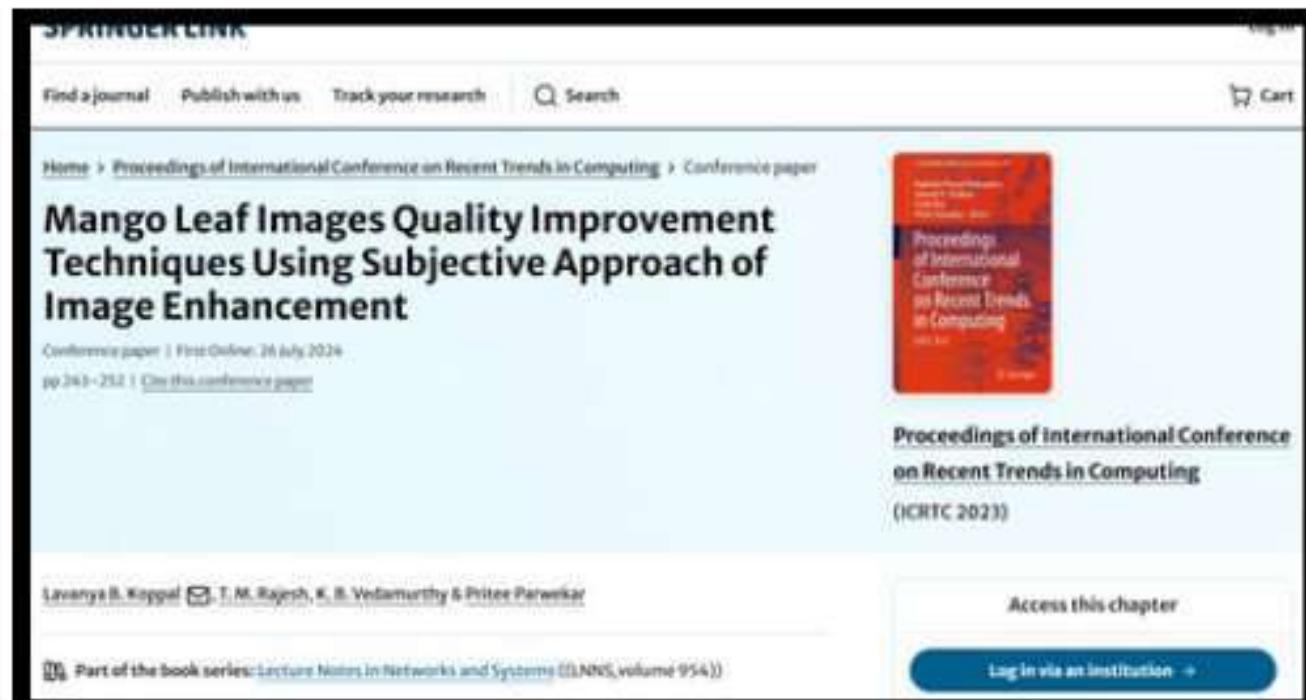


Ms. Shreya N (ENG22CS0165), 4th semester student has successfully participated in the TechSpark National Level Technical fest 2024 held on 23rd July 2024 at DSATM campus, Bengaluru.



Mr. Saraswat Bhattacharya (ENG21CS0504), Final year CSE student Qualified for ML summer school conducted by Amazon ML Summer School, it was an online training program held in the month of July, 2024 related to practical ML applications in the industry and covered important ML concepts.

STUDENT ACHIEVEMENTS



Lavanya B Koppal, Research Scholar and Dr Rajesh TM, Associate Professor, Dept of CSE, published a research article with the title "Mango Leaf Images Quality Improvement Techniques Using Subjective Approach of Image Enhancement" in the International Conference on Recent Trends in Computing which is published in the springer Lecture Notes in Networks and Systems (LNNS, volume 954) and DOI https://doi.org/10.1007/978-981-97-1724-8_22 in July 2024.



K Tejashree, PG Scholar and Dr Rajesh TM, Associate Professor, Dept of CSE, published a research article with the title "Analysis of Arrhythmia from Electrocardiogram (ECG) Data Using ML Framework" in the International Conference on Recent Trends in Computing which is published in the springer Lecture Notes in Networks and Systems (LNNS, volume 954) and DOI https://doi.org/10.1007/978-981-97-1724-8_13 in July 2024.

STUDENT ACHIEVEMENTS



Office of the Controller General of Patents, Designs & Trade Marks
Department for Promotion of Industry and Internal Trade
Ministry of Commerce & Industry
Government of India
(<http://ipindia.nic.in/index.htm>)

INTELLECTUAL PROPERTY INDIA
INSTITUTE OF DESIGN TRADE MARKS
AND TRADE NAMES

Application Details	
APPLICATION NUMBER	202441058545
APPLICATION TYPE	ORDINARY APPLICATION
DATE OF FILING	02/08/2024
APPLICANT NAME	DAYANANDA SAGAR UNIVERSITY
TITLE OF INVENTION	INTEGRATED SYSTEM FOR NOISE REDUCTION, ENHANCEMENT, FEATURE EXTRACTION, AND CLASSIFICATION OF PULMONARY RESPIRATORY DISEASES IN CT SCAN IMAGES
FIELD OF INVENTION	COMPUTER SCIENCE
E-MAIL (As Per Record)	piyushkumarpareek88@gmail.com
ADDITIONAL-EMAIL (As Per Record)	
E-MAIL (UPDATED Online)	
PRIORITY DATE	
REQUEST FOR EXAMINATION DATE	—
PUBLICATION DATE (IJS 11A)	09/08/2024

Application Status

APPLICATION STATUS	Awaiting Request for Examination
--------------------	----------------------------------

[View Documents](#)

Ms. Anitha N.S, Research Scholar, Dr. Rajesh T.M, Associate Professor, Dept of CSE and Dr. Anitha Kini, Associate Professor, Department of Radiology CD-SIMER have published an Indian patent with the title “Integrated System for Noise Reduction, Enhancement, Feature Extraction, And Classification of Pulmonary Respiratory Diseases in CT Scan Images” on 9th August 2024 and the name of Applicant is DAYANANDA SAGAR UNIVERSITY, Application No.202441058545 A.



Ms V.S. Nithya shree (ENG21CS0273), Final year CSE student, has performed Bharatanatyam at the Bharat Utsav event held in Dubai on the occasion of India's Independence Day. This event was attended by dignitaries from various embassies and esteemed guests, making it a truly prestigious platform to contribute to classical dance as a cultural exchange program.

STUDENT ACHIEVEMENTS



Mr Swaraj khan (ENG21CS0433), 7th Semester CSE Student presented research article with the title “Automated PDF Q and a chatbot: Harnessing AI for Efficient Information Retrieval” , in the international conference on Computer Science, Machines Learning and Artificial Intelligence (ICCSMLAI) at Pune, India during 18th August 2024.



Ms S Amrutha Varshini (ENG23CS0430), 3rd semester CSE Student, participated and Won 1st place in the western solo singing competition in the Annual Cultural fest “ESPERANZA 2024” held at DSTAM during July 2024.

STUDENT ACHIEVEMENTS



Mr. Sidmalmadhan (ENG23CS0189), 3rd sem CSE student successfully completed the following online courses on Coursera on August 7th and 14th respectively.

1. Introduction to Microsoft Excel
2. Using Basic Formulas and Functions in Microsoft Excel



Ms. Kiran Jeevan Waghmare (ENG18PPCS04), Research Scholar, Department of Computer Science and Engineering, under the guidance of Dr. Meenakshi Malhotra, completed her Ph.D. Defense VIVA-VOCE entitled “Optimization of Multivariate Pattern Analysis using Brain Computer Interface”, on 04/09/2024 Lecture Hall 2, A Block, SOE, DSU, Harohalli, Bangalore.

STUDENT ACHIEVEMENTS



Mrs. HARSHITHA A N (ENG22CS0068), 5th semester student, Department of CSE, from Dayananda Sagar University, School of Engineering has successfully completed an 8-week online training on Data Science. The training consisted of Introduction to Data Science, Data Analysis Fundamentals, Introduction to Data Visualization, Working with Data, Predictive Analytics using Machine Learning, AI in Data Science, and Capstone Project modules.



Mr. Hrushikesh Raghavendra (ENG22CS0321), 5th semester CSE student has successfully completed ISRO online course on-AI/ML for Geodata Analysis from 19th to 23rd August 2024.

STUDENT ACHIEVEMENTS



Mr. Yash Soni (ENG22CS0211), 5th semester CSE student has participated in website making competition “Web Wizard” based on Halloween theme organised by IEEE ComSoc, IEEE Student branch and he awarded with first prize during 13th September 2024.



Mr. Chandan N S (ENG22CS0038), 5th semester CSE student has successfully completed 100% of the self-paced training courses on MATLAB Onramp on 10th September 2024 and Image Processing Onramp on 13th September 2024 by MathWorks Training Services.

STUDENT ACHIEVEMENTS



Ms. Manavi P (ENG23CS0101), 3rd semester CSE student has participated in website making competition “Web Wizard” based on Halloween theme organised by IEEE ComSoc, IEEE Student branch and he awarded with third prize during 13th September 2024.

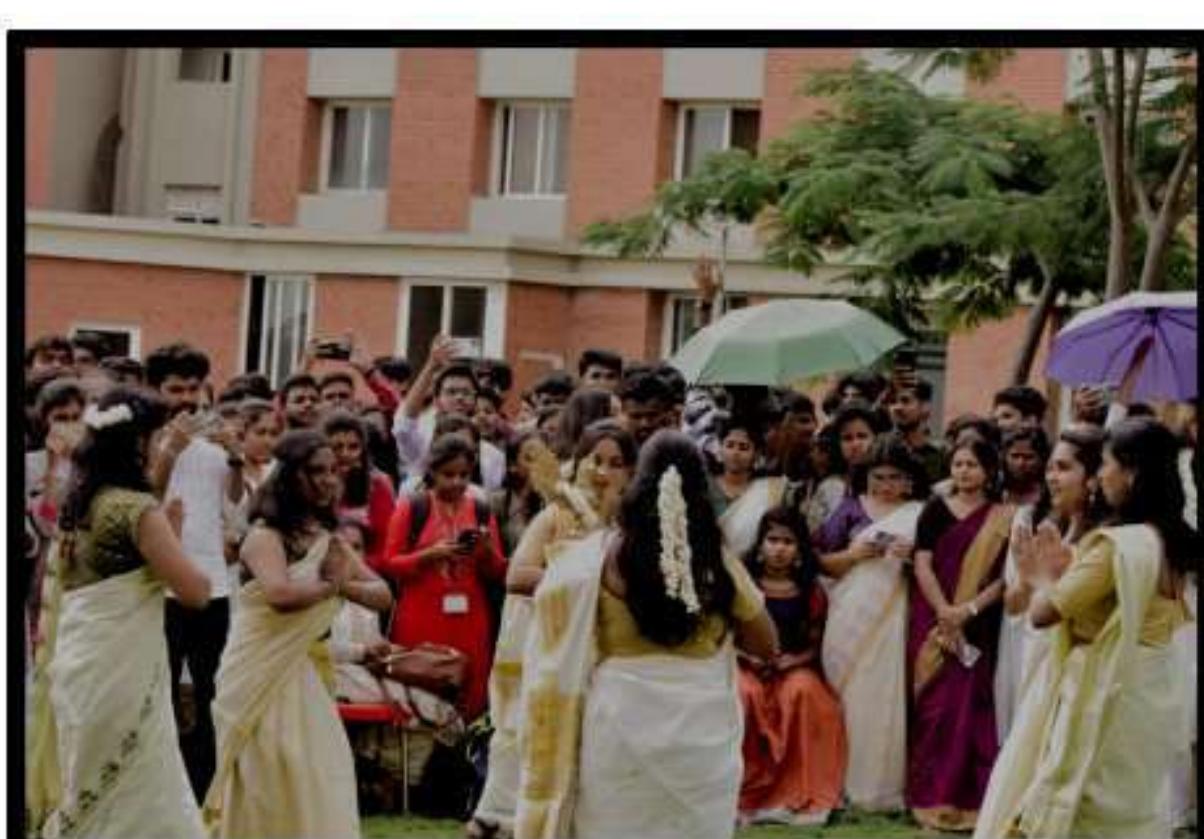


Mr Sahil Singh (ENG23CS0435), Mr Aadarsh kumar (ENG23CS0238) and Mr Arji Jethin Naga Sai Eswar (ENG23CS0267), 3rd semester CSE students has successfully participated in website making competition “Web Wizard” based on Halloween theme organised by IEEE ComSoc, IEEE Student branch DSU during 13th September 2024.

STUDENT ACHIEVEMENTS



Mr. Omkar S G (ENG23CS0128), 3rd semester CSE student participated in the Engineer the Future: Ideathon competition organized by the club YANTROVE from the Department of CSE (Artificial Intelligence and Machine Learning) on 18th September, 2024 and won 1st place in the Ideathon competition.



Ms. Krishna Rajesh (ENG22CS0556), 5th semester CSE student has participated in the Engineer the Future: Ideathon competition organized by the club YANTROVE from the Department of CSE (Artificial Intelligence and Machine Learning) on 18th September, 2024. And she also performed dance at Onam celebration on 20th September 2024 at DSU Harohalli.

STUDENT ACHIEVEMENTS



Mr. Chandan N S (ENG22CS0038), 5th semester CSE student has successfully Completed a Linked in Learning course on “What is Generative AI?” during August 2024 and also completed Internships on Python programming intern from 12-08-2024 to 08-09-2024 at Internpe and Web Development Intern from 01-08-2024 to 01-09-2024 at Coding Raja technologies.



Mr Saurabh Kumar (ENG23CS0446), 3rd semester CSE student has successfully Completed a Skill Development Workshop from skill Intern on 09th August 2024.

STUDENT ACHIEVEMENTS



Mr. Clifford Thiyam, (ENG22CS0043), Mr Gaurav Shetty (ENG22CS0061) and Mr. Darshan B (ENG22CS0044) Students of 5th semester as team “Reshme Warriors” , Department of CSE, have successfully participated in the 36-hours Hackathon DSU DevHack' 24 organized by Department of CSE, Dayananda Sagar university on September 27th and 28th 2024.



Ms. Nandini R - ENG22CS0108, Ms Neethu J - ENG22CS0110 and Ms. Nisarga V P - ENG22CS0111, Students of 5th semester as team “Hash” , Department of CSE, have successfully participated in the 36-hours Hackathon DSU DevHack' 24 organized by Department of CSE, Dayananda Sagar university on September 27th and 28th 2024.



DAYANANDA SAGAR
UNIVERSITY

STUDENT ACHIEVEMENTS



STUDENT ACHIEVEMENTS



The following CSE students have successfully participated in the Nasa International Space Apps Challenge 2024 at Dayananda Sagar University, Harohalli on 5th and 6th October 2024.

Ms. Pragati. S. Mallapur (ENG23CS0134)

Mr. Abhishek R A (ENG23CS0243)

Mr. Chinni Rathod (ENG22CS0042)

Ms. Arpita Sahoo (ENG23CS0271)

Ms. Unnati Rana (ENG23CS0670)

Mr. Piyush Nandan (ENG22CS0390)

Ms. Varshini MG (ENG23CS0215)



STUDENT ACHIEVEMENTS

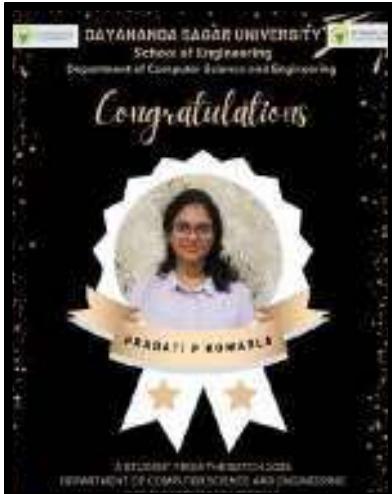


Ms. Ridhi Golchha (ENG23CS0164), 3rd Semester CSE student Participated and volunteered at the Nasa International Space Apps Challenge 2024 at Dayananda Sagar University, Harohalli on 5th and 6th October 2024.

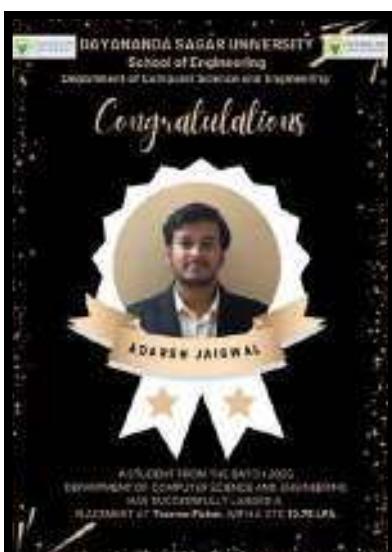


Ms. Bukkapatnam Harshyara (ENG21CS0085) Student from Final year, Computer Science Department has been placed in Hitachi KES, Japan with a CTC of 35 Lakhs. This is the 1st International placement offer got by the 2025 batch student.

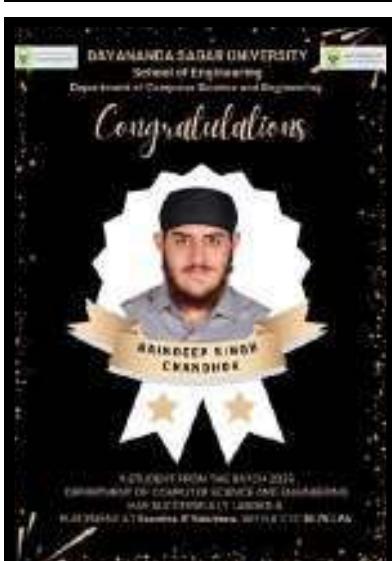
STUDENT ACHIEVEMENTS



Ms. Pragati Komarla (ENG21CS0300) student from 2025 batch, Computer Science Department has been Placed in the company IG Group, with a CTC of 10.33LPA.



Mr. Adarsh Jaiswal, (ENG21CS0010) student from 2025 batch, Computer Science Department has been Placed in the company Thermo Fisher, with a CTC of 12.75LPA.



Mr. Naindeep Singh, (ENG21CS0261) student from 2025 batch, Computer Science Department has been Placed in the company Eurofins IT Solutions, with a CTC of 10.75LPA.

STUDENT ACHIEVEMENTS



Mr. Pavan Kumar GR (ENG23CS0131) and Mr Arshanapally NVS Srikshith Rao (ENG23CS0528) from 3rd Semester, participated in the Nasa International Space Apps Challenge 2024 at Dayananda Sagar University, Harohalli on 5th and 6th October 2024 and the team is selected in the top 10 teams for GLOBAL Nominee from the Harohalli local event representing India against other countries on 9/10/2024. On the same day the team received the award for the same.



Mr. Clifford Thiyam, (ENG22CS0043), from 5th Semester, Department of CSE, participated in the People's Conference held on the 5th and 6th of October, 2024 as the Delegate of Bulgaria in the UNHRC, PES PECON'24 MUN.

STUDENT ACHIEVEMENTS



Ms. Meghana H S (ENG22CS0103), from 5th Semester, Department of CSE, has successfully completed 8 weeks NPTEL Online Certification course on "Database Management Systems", with 71% in September 2024.

Ms. Nasreen Taj M B (ENG19PPCSI5), Research Scholar, Department of Computer Science and Engineering, under the guidance of Dr. Girisha G S, Professor, completed her Ph.D. Defense VIVA-VOCE entitled "Design and Development of Aspect Based Sentiment Analysis Model for Healthcare Sector", on 18/10/2024 Lecture Hall 1, A Block, SOE, DSU, Harohalli, Bangalore–562112.



STUDENT ACHIEVEMENTS



Mr. Subbareddy Meruva (ENG17PPCS20), Research Scholar, Department of Computer Science and Engineering, under the guidance of Dr. Bondu Venkateswarlu, Associate Professor completed his Ph.D. Defence VIVA-VOCE entitled “Improving the Performance of Association Mining Techniques for High Utility Itemsets,” on 21st October, 2024 in Room No A-507, A Block, SOE, DSU, Harohalli, Bangalore-562112.



Ms. Savita Vijay (ENG16PPCS06), Research Scholar, Department of Computer Science and Engineering, under the guidance of Dr. M.K Banga, Professor, completed her Ph.D. Defence VIVA-VOCE entitled, “Efficient Network Management for IoT” on 21st October, 2024 in Room No A-504, A Block, SOE, DSU, Harohalli, Bangalore-562112.



STUDENT ACHIEVEMENTS



Mr. Swaraj Khan and Mr. Harish Sasikumar, 7th-semester students from the Computer Science and Engineering department, Participated and reached the finals of the Nokia NBUC Ideathon on October 21, 2024, with their innovative idea, "Automated PDF Q&A Chatbot - Harnessing AI for Efficient Information Retrieval" . And also, another team of 7th semester CSE students Mr. Chirag Aswal, Mr. Dibyansu Singh, Mr. Kiran Gangoor, and Mr. Akshay H S - For presenting their brilliant project, "Optimized Navigation in 3D Space" , in the Nokia NBUC Ideathon. which are guided by Dr. Savita Vijay (Ex.Spoc-DSU), Neeta A S (NBUC), and the present spoc-DSU are Dr. Sivananda Reddy and Dr.Gokul Krishnan are witnessed the event.



STUDENT ACHIEVEMENTS



Ms. Sailaja M (ENG19PPCS08), Research Scholar, Department of Computer Science and Engineering, under the guidance of Dr. Girisha G S, Professor, completed her Ph.D. Defence VIVA-VOCE entitled “Interactive tool for prognosis of specific learning disabilities in primary school children using machine learning” on 23/10/2024 Room No 506, A Block, SOE, DSU, Harohalli, Bangalore-562112.



Mr. C Jayaramulu (ENG17PPCS09), Research Scholar, Department of Computer Science and Engineering, under the guidance of Dr. Bondu Venkateswarlu Associate Professor completed his Ph.D. Defence VIVA-VOCE entitled “A Novel Machine Learning Framework for Outlier Detection in High Dimensional Data” on 25th October, 2024 in Room No A-507, A Block, SOE, DSU, Harohalli, Bangalore-562112.



STUDENT ACHIEVEMENTS



Antriksh Singh (ENG20CS0037), Aditi Bharath (ENG20CS0014), Aryanjeet Singh (ENG20CS0042), Ashmita Neog (ENG20CS0043), UG Scholars and Dr George Fernandez I, Associate Professor, Dept. CSE, School of Engineering, Dayananda Sagar University, Bengaluru, India, published a patent with the title “SMART-SEGREGATION OF WASTE MANAGEMENT USING IOT” and the applicant name “Dayananda Sagar University” on 6th of September 2024.



Mr. Gaurav Shetty (ENG22CS0061), 5th semester CSE student participated in the month long online Hacktoberfest successfully from open-source contribution and each level unlocked certain limited edition badges during November 2024.



Ms. Jiyanshee Jain (ENG23CS0330), 3rd semester CSE student along with Students of CSE(AIML) as team, emerged as champions in the prestigious Zerodha Varsity Quiz! Competing among 600 participants across diverse schools including management, law, medicine, and engineering. The team showcased exceptional knowledge and teamwork, earning the esteemed 1st place title along with a cash prize of 12,000 INR on 6th November 2024.

STUDENT ACHIEVEMENTS



The team "Shamsheer" lead by Mr Rohan Jaiswal (ENG22CS0578) has been shortlisted for Grand finale of SIH 2024 under the Guidance of Dr Bipin Kumar Rai, Associate Professor, CSE.



Ms. B. Saishree [ENG22CS0260], Ms. Deepthi S V [ENG22CS0287], Ms. Deethiksha [ENG22CS0288], Ms. Harini Sri S [ENG22CS0314] and Ms. Monishree [ENG22CS0372] has a team of students selected to attend Pragati- Path to future skill program by Infosys Springboard 2024.



Mr. Omkar S G (ENG23CS0128), 3rd semester CSE student has successfully participated in the Zerodha Varsity Quiz held on 6th November 2024 at Dayananda Sagar University.



Ms. Shaik Saara Shireen (ENG23CS0179), 3rd semester CSE student has successfully Completed the Online courses on the Infosys Springboard platform with the course names "Start Programming in Core JAVA" and "Skill UP in JAVA Programming" during 6th and 8th November 2024 respectively.

STUDENT ACHIEVEMENTS



Mr. Chinnarathod Ghadhikumar (ENG22CS0042), 5th semester CSE student has successfully Completed the Online Examination for “Applications & use cases Professional Certification” for the first 2 levels by a RAPIDMINER An ALTAIR Company during November 2024.



Mr. Yash Soni (ENG22CS0211), 5th sem CSE student, Completed Certification from Tata Group's on the title “Data Visualisation: Empowering Business with Effective Insights” on Forage during 16th November 2024.

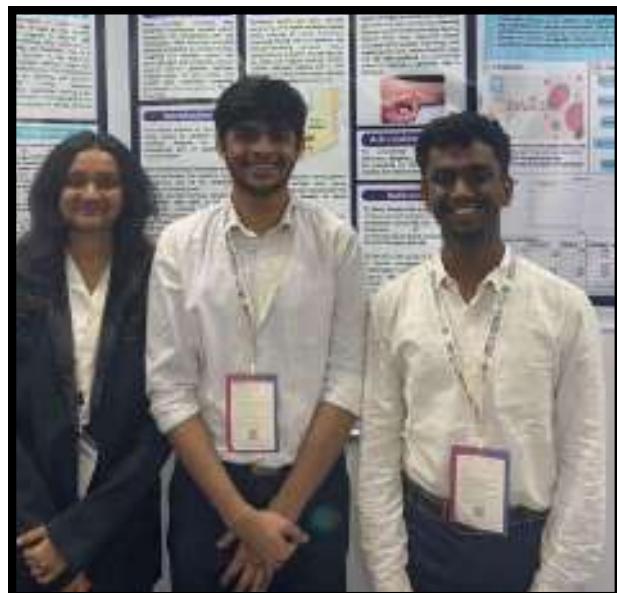


Mr. Shambhuling (ENG23CS0180), 3rd Semester, Dept of CSE has successfully attended the Bengaluru Tech Summit-BTS 2024 from 19th to 21st November 2024 at Bengaluru palace as a Visitor.

STUDENT ACHIEVEMENTS



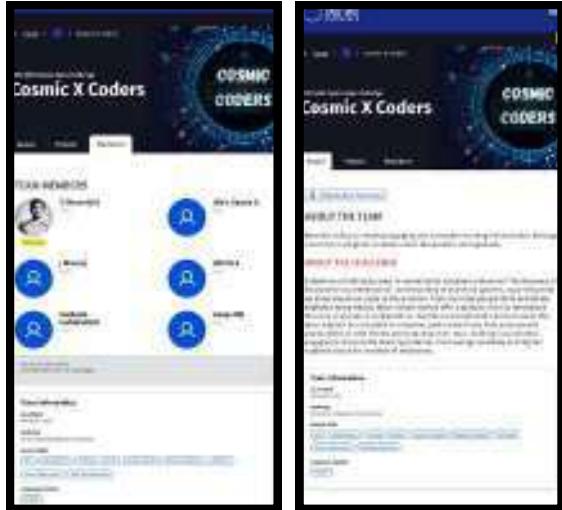
Mr. Saikumar Jadhav (ENG22CS0145) and Mr. Rahul Jadvani (ENG22CS0129), 5th sem CSE students secured best project award with 5k price amount in web .0 & Blochchain Track in Quant-A-Maze 2.0 held from 14th-16th November 2024 a 36hrs Hackathon with the product name “FeedForward” at NMIT, Bengaluru.



Mr. Eshaan Bhat (ENG22CS0539), Ms Smriti Sanjay Eligar (ENG22CS0172) and

Mr. Aditya N (ENG22CS0519) Presented a poster on "Smart Bandages and Bio Sensors: Accelerating Post surgery recovery" at Bengaluru Tech Summit-BTS 2024 from 19th to 21st November 2024 at Bengaluru palace.

STUDENT ACHIEVEMENTS



Mr. S Shreenidhi (ENG23CS0169), Mr. Vinith S (ENG23CS0221), Mr. Jithin Gowda N (ENG23CS0328) as team of "Cosmic X Coders" were shortlisted as the Global Nominee for the NASA Space Apps Challenge 2024.



Mr. Amith R (ENG21CS0033) and Ms. D Akshitha (ENG21CS0102), 7th semester, Department of CSE, under the guidance of Dr. Pramod Kumar Naik, published a research paper "An Advanced Approach to Detect and Classify Lung Nodules Using CT Images" at the "International Conference for Machine Learning Algorithms" held at Chitkara University, Himachal Pradesh. https://link.springer.com/chapter/10.1007/978-3-031-75861-4_35.



Ms. Shrawya K S(ENG22CS0455), from 3rd year CSE, successfully participated in HAXLR8-HACKATHON Event held on 15th November 2024, organized by Dept. of Electronics and Communication Engineering, Maharaja Institute of Technology Mysore.

STUDENT ACHIEVEMENTS



Mr. Saikumar Jadhav (ENG22CS0145) and Mr. Rahul Jadvani (ENG22CS0129), 5th sem CSE students secured the First Runner-Up position with a prize money of 100000 /- (one Lakh) in the "AI & Data science 24hrs codeathon" organized by RBIH and Canara Bank held on 20th & 21st of November 2024 at IIIT Bengaluru.



Mr. Darshan Kumar M (ENG20CS0081), Mr. Guntur Lohith Sai (ENG20CS0106), Mr. Jasin Jayachandran (ENG20CS0131), and Mr. Kapil Adarsh S A (ENG20CS0143) students of CSE under the Guidance of Prof. Suvika K V, Assistant professor, published a paper in the Scopus indexed Journal with the title "Continuous user Authentication through Keystroke Dynamics" in the Journal GRENZE International Journal of Engineering and Technology during November 2024.



Mr. Jyotiraditya Lal Rakshit (ENG23CS0332), 3rd Semester, Dept of CSE has successfully completed 4 weeks NPTEL Online Certification course on "Moral Thinking: An Introduction to Values and Ethics", with 91% ELITE Gold rating during August to September 2024.

STUDENT ACHIEVEMENTS



Mr. Karanveer Singh (ENG21CS1027), Ms. Akshaya Singh (ENG20CS0022), Mr. Saksham Dubey (ENG20CS0310), and Mr. Hemang Verma (ENG19CS0119) students CSE under the Guidance of Prof. Mala B A, Assistant professor, published a paper in the Scopus indexed Journal with the title “Smart Bin: A Segregation and Management of Garbage for Smart City using IoT” in the Journal GRENZE International Journal of Engineering and Technology during November 2024.

The following Students of 7th Semester CSE students successfully completed 12 weeks NPTEL Online Certification course from July to October 2024.

Course: Software Testing

Name	USN	Percentage	Rating	Category
Sree Vibha G	ENG21CS0412	76%	Elite	Silver
Sindhu Vijay	ENG21CS0399	50%		
Sri Vishnavi Ananya Gollapalli	ENG21CS0414	56%		
Syed Safwan Ghouri	ENG21CS0438	55%		
Syed Rayan	ENG21CS0437	56%		
Sudeep Biradar	ENG21CS0421	52%		

STUDENT ACHIEVEMENTS



Course: Introduction to Industry 4.0 and Industrial Internet of Things

Name	USN	Percentage		
Smriti Singh	ENG21CS0404	76%	Elite	Silver Rating
Akriti Nanda	ENG21CS0026	76%	Elite	Silver Rating



STUDENT ACHIEVEMENTS



STUDENT ACHIEVEMENTS



Ms. Charmi V(ENG23CS0291), 3rd Semester, Dept of CSE has successfully participated and won 1st prize in the GLAM-ICON Fashion Show-2024, Organized by Department of Fashion and Apparel Design, T. John College, Bengaluru, during 15th November 2024 and She also attended the AI-Quiz organized by IEEE CIS Student Chapter, department of CSE(AIML), SOE, DSU during 20th November 2024.



Mr. Ronada Sakalesha (ENG23CS0165), 3rd Semester CSE Student successfully participated in the BuildIt Workshop and also participated in the 6-Hour Hackathon BuildIt organized by the Department of CSE, Dayananda Sagar University on 25th November 2024.



STUDENT ACHIEVEMENTS



Mr Rohan Jaiswal (ENG22CS0578), Mr Utkarsh Priya (ENG22CS0602), Mr Ritwik Vasundh (ENG22AM0125), Ms Rashi Baidya (ENG22CS0406), Ms Chinmayi Palled (ENG22CS0280), and Ms Jiya Patel (ENG22CS0387), 5th Semester CSE Students as team Shamsheer mentored by Dr Bipin Kumar Rai Won the 1st Prize of worth 1 lakh Rupees in the Grand Finale, Smart India Hackathon 2024 (36 hours Hackathon) at Coimbatore Nodal centre, organized by MoE, Government of India for giving solution framework to the Government of National Capital Territory of Delhi in the area of Health Data Information & Management System Mobile Application (HDIMS) during 11th and 12th December 2024.



Mr. Jayesh Ranjan (ENG23CS0326), 3rd semester CSE Student and Student President, E-CELL, wins A Notable Innovation Award of ₹40,000 cash prize at INNOTECH IDEATHON 2024, held by DERBI Foundation & SINE IIT Bombay on Dec 20-21, 2024.

STUDENT ACHIEVEMENTS



Mr. Sameer S Katte (ENG22CS0148), Mr. Saikumar V Jadhav (ENG22CS0145), Mr. Sriram Ravindra (ENG22CS0185), and Mr. Sai Shravan V (ENG22CS0144), 5th Semester CSE Students as team Participated and received runner ups by winning cash prize of 20K in the National Level HackElite '24 event conducted by JSS, Mysore during 14th December 2024.

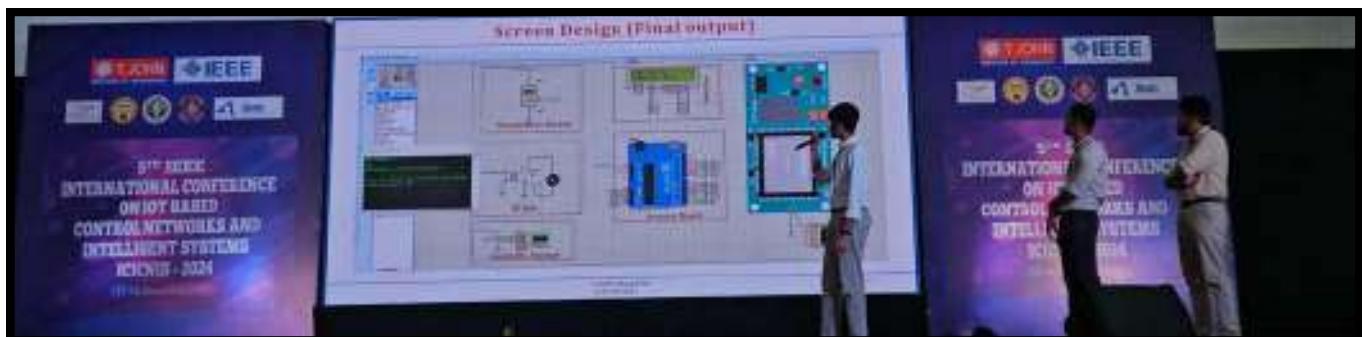


Mr Rahul H Jadvani (ENG22CS0129) and Mr. Saikumar V Jadhav (ENG22CS0145), 5th semester CSE Students have participated and stood as winners winning 300 USD cash prize at National Level I Love Hackathon conducted by Blockon and Nuchain on 27-28 December 2024.

STUDENT ACHIEVEMENTS



Mr. Prajwal B R (ENG22CS0121) , Mr. Navtej S (ENG22CS0109), Mr. Nithin P Hegde (ENG22CS0113), Mr. Pavankumar P S (ENG22CS0117) and Mr. Pratham U K (ENG22CS0123), 5th semester CSE Students, under the guidance of Prof. Mala B A, Assistant Professor presented a paper titled “Smart Cradle: A Secured Assistance and Monitoring system for baby using IoT” in the IEEE 5th International Conference on IoT Based Control Networks and Intelligent Systems (ICICNIS-2024) organized by T. John Institute of Technology, Bengaluru, Karnataka on 17th December 2024.



STUDENT ACHIEVEMENTS



Ms. D N Padmashri, Ms. Boomika B, Ms. Deepthi S V, Ms. B Saishree, 5th semester CSE students under the guidance of Prof. Suvika K V, Assistant Professor, presented a paper in the Scopus indexed conference with the title “Comparative Analysis of Machine Learning Algorithms for Enhanced Clinical Prediction of Fetal Health Status”, in the Fifteenth International Conference on Advances in Engineering and Technology, AET 2024 Jointly organized by the IDES and Association of Computer Electrical Electronics and Communication Engineers (ACEECom) online on 30th December 2024 in NCR, Delhi, India and it will be published in the GRENZE International Journal of Engineering and Technology (GIJET).

STUDENT ACHIEVEMENTS



Mr. Krishna Idnani (ENG22CS083), 5th Semester CSE student and Mr.Nikhil Kumar(Team Leader), Mr.Janardhan KS, Mr. Sujeeth Kumar DS, Mr. Om Singh, Ms. Jyoti Shree S Gotti, student's team of Data Science participated in the Smart India Hackathon 2024 Grand Finals that happened on 11th and 12th December 2024. with Mentor: Prof. Manjula M and Prof. Monish L, Assistant Professor, Department of Computer Science and Engineering (Data Science).



Mr Dhruv, CSE student has won the second Runner-up position with cash prize of rupees 500/ at the Quiz Circuit of Tech-DESAFIO, organized by the Department of CS&D, Dayananda Sagar Academy of Technology and management during 13th November 2024.



DAYANANDA SAGAR
UNIVERSITY

STUDENT ACHIEVEMENTS



INTERNSHIP EXPERIENCE



Y JITENDRA VARMA

ENG21CS0483

During My Infosys Springboard Internship, I Worked on developing and optimizing On Online Food Ordering System applying Various software development and database Management techniques to enhance user experience and streamline the ordering Process I gained hands on experience with front end & back end Integration as well as working with Apl's to handle order Placements, payments and delivery tracking.

Beyond technical learning, I improved my time management by handle of multiple tasks efficiently and problem solving skills by identify and resolve issues related to user interface design, System performance and security measures It helped me improve my collaboration skills as I worked close with team members include of data privacy and Collaborative teamwork. This internship helped me to strengthened both my technical and professional skills, prepared me for real wild challenges.

INTERNSHIP EXPERIENCE



Yashas M
ENG21CS0485

During my Infosys Springboard internship, I worked on sentiment analysis and Text classification, applying machine learning and NLP techniques to analyze social media content. I implemented both unsupervised and supervised learning methods, enhancing my skills in text preprocessing, model evaluation, extracting data-driven insights, and handling unbalanced data effectively.

Beyond technical learning, I improved my time management by handling multiple tasks efficiently and gained exposure to professional ethics, including data privacy and collaborative teamwork.

This internship strengthened my technical and professional skills, preparing me for real-world challenges.

STUDENT ACHIEVEMENTS



Mr. Sameer S Katte (ENG22CS0148), Mr. Sai Shravan V (ENG22CS0144), Mr. Sriram Ravindra (ENG22CS0185) and Mr. Harshith GR (ENG22AM0021) has a team Papz participated and represented Dayananda Sagar University in a National level offline hackathon "Hack-A-League" conducted in Global Academy of Technology Bangalore conducted on 1st and 2nd February 2025. The team has secured 2nd place with a cash prize of Rs. 15000 and also achieved the highest reward for a team from Karnataka.



Mr. Nithin Kataria V (ENG24CS0151), Mr. D A Ajay(ENG24CS0052) and Ms. Garima (ENG24CY0105) 2nd sem CSE students as a team participated in Kala Quest competition held at IIT Madras during 28th February 2025 and won the Runner Up (2nd Prize) of KalaQuest! prize money Rs. 8,000 on March 11th 2025 along with certificates.

STUDENT ACHIEVEMENTS



Mr. Kumar Ayush (ENG22CS0347), Mr. Meet Pandya (ENG22CS0363), Mr. Abhay Prakash Choubey (ENG22CS0221), Ms. Medha Sree Anand(ENG22CS0562), 6th semester CSE students secured fourth place in the Alliance 3.0 -Code Sangram Hackathon with a cash prize of Rs. 5000 under the mentorship of Prof. Shilpa Sudheendran, Assistant professor during 19th to 21st March 2025.



Mr. Veerasha R (ENG22CS204), 5th semester, Department of CSE successfully completed the Udemy course on “Learn JAVA Programming Beginner to Master” , on 8th February 2025 which is around 62 hours.



Mr. Shrinath Sonavale (ENG23CS0185), 3rd semester, Department of CSE successfully participated in the Devhack 6.0 in Parsec 5.0, The annual Technical Fest of IIT Dharwad during February 2025.

STUDENT ACHIEVEMENTS



Mr. Muzammil (ENG23CS0120), 4th semester CSE Student has successfully participated in the Photography Workshop conducted by Le Gras Boulevard Photography Club conducted by DSU on 14th March 2025.

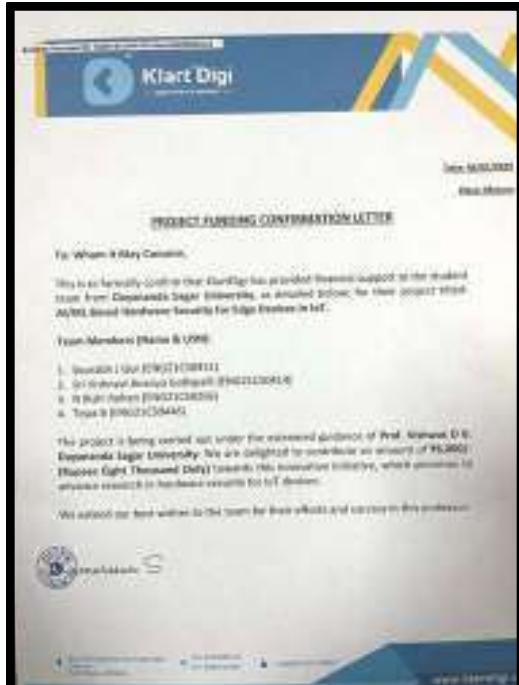


Mr. Ram Charan G (ENG24CS1014), 2nd semester CSE student has Actively participated in National Science Day 2025 organized on 28th February 2025 by Department of basic Sciences, School of Engineering, DSU, Harohalli.



Mr. Shreyas H Reddy (ENG21CS0388), Mr. Shreyas Sridhar (ENG21CS0389), Mr. Shrinikethan S(ENG21CS0392), and Mr. Sanju John (ENG21CS0361), 8th semester CSE Students received funding of ₹6500 for the project titled “Emergency Traffic prioritization System(ETPS)”, under the guidance of Prof. Sasikala N, Assistant Professor, Department of CSE from J&J construction Benson Town, Bengaluru on 25th March 2025.

STUDENT ACHIEVEMENTS



Mr. Sourabh J Gor (ENG21CS0411), Ms. Vishnavi Ananya Gollapalli (ENG21CS0414), Mr. N Rishi Rohan (ENG21CS0256) and Mr. Tejas B (ENG21CS0446) 7th semester CSE Students, under the guidance of Prof. Vishwas D B, Assistant Professor, received a project funding of Rupees 8000/- from Klart Digi for the title “AI/ML Based Hardware Security for Edge Devices in IoT” on 6th January 2025.



Mr. Prajwal B R (ENG22CS0121) , Mr. Navtej S (ENG22CS0109), Mr. Nithin P Hegde (ENG22CS0113), Mr. Pavankumar P S (ENG22CS0117) and Mr. Pratham U K (ENG22CS0123), 5th semester CSE Students, under the guidance of Prof. Mala B A, Assistant Professor published IEEE conference paper titled “Smart Cradle: A Secured Assistance and Monitoring system for baby using IoT” in the 5th International Conference on IoT Based Control Networks and Intelligent Systems (ICICNIS 2024) during January 2025.

STUDENT ACHIEVEMENTS

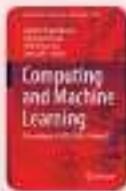


Decentralized Healthcare Ledger System on Hedera with Deep Learning Analytics

Conference paper

First Online: 24 January 2025

pp 179–195 | Cite this conference paper



Computing and Machine Learning

Pranav Bawgikar , K. J. Devaiah, G.
Yogdeep & V.

Mr. Pranav Bawgikar (ENG21CS1015), Mr. K. J. Devaiah (ENG20CS0136), Mr. G. Yogdeep(ENG20CS0418), Students of CSE published a paper under the Guidance of Dr. V. Revathi, Associate Professor, with the title “Decentralized Healthcare Ledger System on Hedera with Deep Learning Analytics” , in the Springer book series Lecture Notes in Networks and Systems ((LNNS, volume 1144), with DOI https://doi.org/10.1007/978-981-97-7839-3_12, during 24th January 2025.

Environmental Impact Analysis using Satellite Image Processing: A Case Study on Bangalore STRR Phase-I

Mr. Varun P. Shrivaths (ENG20CS0402), Mr. Girish Singh BS(ENG22CS3001), Ms. Smriti Reddy (ENG20CS0388), Students of CSE, under the guidance of Dr. Rajesh T M, Associate Professor, Department of CSE, published IEEE conference paper titled “Environmental Impact Analysis using Satellite Image Processing: A Case Study on Bangalore STRR Phase-1” in the 2024 4th Asian Conference on Innovation in Technology (ASIANCON) Pune, India during January 2025.

STUDENT ACHIEVEMENTS



Mr. Tenzin Kalden (ENG22CS0485), 5th semester CSE student, Successfully participated in the Day 2-15th February 2025 in the Management:February Series Organized by the Unstop.



Mr. Nithesh G (ENG22CS0112), 5th semester CSE student, Successfully completed a online 20 hours AWS Academy Graduate - AWS Academy Cloud Foundations certificate during 12th February 2025.



Ms. Anitha N. (ENG21PCS02), Research Scholar, Department of Computer Science & Engineering, under the guidance of Dr. Rajesh T M, Associate Professor, and Dr. Anitha Kini, Department of Radiology, CDSIMER, successfully completed her Ph.D. Defence VIVA-VOCE entitled "An Automated Framework for Detection and Classification of Pulmonary Diseases in CT Scan Images" on Friday, 21st February 2025, from 10:00 AM to 11:00 PM in the CSE Lab-514, SOE, DSU, Harohalli, Bangalore-562112. She is also the first Ph.D. scholar produced in collaboration between DSU, SOE & CDSIMER.



STUDENT ACHIEVEMENTS



Mr. Manoj S (ENG21CS0222), Mr. Kiran Gangoor (ENG21CS0189) , Ms. Harshita S (ENG21CS0154), 8th Semester CSE Students, Dr. Girisha G S, Professor, Dr. George Fernandez I, Associate Professor, Prof. Pooja Shree H R, Assistant Professor, Department of CSE, has published an Indian patent with the title “FlameWatcher: Intelligent Gas Leak and Automatic Shutoff System” with the applicant name “Dayananda Sagar University” , during 21st February 2025.



Ms. D N Padmashri, Ms. Boomika B, Ms. Deepthi S V , Ms. B Saishree, 6th semester CSE students under the guidance of Prof. Suvika K V, Assistant Professor, published a paper in the Scopus indexed journal GRENZE International Journal of Engineering and Technology (GIJET) during 26th February 2025 with the title “Comparative Analysis of Machine Learning Algorithms for Enhanced Clinical Prediction of Fetal Health Status” , presented in the Fifteenth International Conference on Advances in Engineering and Technology, AET 2024 Jointly organized by the IDES and Association of Computer Electrical Electronics and Communication Engineers (ACEECom) NCR, Delhi, India.

STUDENT ACHIEVEMENTS



Mr. Bhupendar Kumawat (ENG21CS0078), Mr. Darshan D (ENG21CS0104), Mr. Gangadhara B (ENG21CS0136), 8th Semester CSE students under the guidance of Dr. Bondu Venkateswarlu, Associate Professor, published a paper in the Scopus indexed journal GRENZE International Journal of Engineering and Technology (GIJET) during 26th February 2025 with the title “Predictive Modelling of Infectious Diseases”, presented in the Fifteenth International Conference on Advances in Engineering and Technology, AET 2024 Jointly organized by the IDES and Association of Computer Electrical Electronics and Communication Engineers (ACEECom) NCR, Delhi, India.



Mr. Pranav Vinod Pillai (ENG22CS0393), 6th semester CSE student has successfully participated in the IdeaVerse'25 hosted by the IEEE Information Theory Society (CSE-DS), Dayananda Sagar University on 20th February 2025.

STUDENT ACHIEVEMENTS



Ms. Smriti Eligar (ENG22CS0172), Mr. S.G Sumanth(ENG22CS0140) and Mr. Samarth Kushwaha (ENG22CS0147), 6th semester CSE students as a team “Innovation Forgers” has successfully participated and won 1st place with cash prize of worth 3k in the IdeaVerse’25 hosted by the IEEE Information Theory Society (CSE-DS), Dayananda Sagar University on 20th February 2025.



Mr. Mohammed Abdal Hussain(ENG23CS0112), Ms. Arpita Sahoo (ENG23CS0271), Ms. Vismitha H M (ENG23CS0226), Ms. Varshini Mallayya Guruvainavar (ENG23CS0215), Mr. Bhargav Thupalli (ENG23CS0283), Mr. Harshith Hegde (ENG23CS0320), Mr. Azeem Gundwan (ENG23CS0027), Mr. Mohammad Zakriya Hulkund (ENG23CS0111), Mr. Muzammil (ENG23CS0120), Mr. Mothe Abhinay Goud (ENG23CS0369), 4th semester CSE students have successfully participated in the AI Innovation Day: Bhasha Bandhu Ideathon on 25th February 2025, organized Department of CSE-AIML, DSU, SOE in collaboration with Microsoft and the Government of India's Bhashini Initiative.



STUDENT ACHIEVEMENTS



Mr. Harshith Hegde (ENG23CS0320), 4th semester CSE student has Actively participated in H4CKP13T 0x01 CTF, an International Capture The Flag (CTF) Competition, held on 27th February 2025 organized by H4CKP13T (Department of CSE Cybersecurity).

STUDENT ACHIEVEMENTS



KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY						
Indian Institute of Science Campus, Bangalore - 560 012 Project Proposals for Student Project Programme (SPP) 2024-25 List of Student Project Proposals Approved for Sponsorship						
SL. NO.	PROJECT TITLE	DEPARTMENT	PROJECT TEAM	PROJECT COST	SPONSOR	
481_M_3891	PERFORMANCE OPTIMIZATION OF BASIC COMPUTER CODE	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHESH KUMAR	Rs. 10,000/-	Mr. RAHESH KUMAR Mr. RAHUL DIXIT Mr. RAHUL KUMAR Mr. RAHUL KUMAR
481_M_3904	ROBUST IMAGE PROCESSING ALGORITHM	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR
481_M_3909	REPORT PREDICTION	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR (Team)	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR
481_M_3914	ADVANCED ALGORITHMS FOR 3D OBJECT RECOGNITION AND CLASSIFICATION FOR GPU COMPUTATION	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR
481_M_3919	VISIONSET 3D	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR
481_M_3947	MANAGE, ADMINISTER AND MONITOR BCI	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR

KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY						
Indian Institute of Science Campus, Bangalore - 560 012 Project Proposals for Student Project Programme (SPP) 2024-25 List of Student Project Proposals Approved for Sponsorship						
SL.	PROJ. NO.	PROJECT TITLE	DEPARTMENT	PROJECT COST	SPONSOR	
482_M_3984	EARLY MORNING DETECTION	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR
482_M_3995	SAFETY GUARANTEE IN DRIVING WITHIN SPEED LIMIT	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR
482_M_4004	WEATHER PREDICTION AS A FACTOR OF DRIVING SAFETY	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR
482_M_4026	WEATHER PREDICTION FOR DRIVING SAFETY	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR
482_M_4039	WEATHER PREDICTION FOR DRIVING SAFETY	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR
482_M_4044	WEATHER PREDICTION FOR DRIVING SAFETY	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR

KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY						
Indian Institute of Science Campus, Bangalore - 560 012 Project Proposals for Student Project Programme (SPP) 2024-25 List of Student Project Proposals Approved for Sponsorship						
SL. NO.	PROJ. NO.	PROJECT TITLE	DEPARTMENT	PROJECT COST	SPONSOR	
483_M_4224	INTERFACING OF A 3D DRONE WITH A 3D PRINTED 3D SCANNER	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR
483_M_4237	WEATHER PREDICTION FOR DRIVING SAFETY	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR
483_M_4243	WEATHER PREDICTION FOR DRIVING SAFETY	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR
483_M_4254	WEATHER PREDICTION FOR DRIVING SAFETY	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR

KARNATAKA STATE COUNCIL FOR SCIENCE AND TECHNOLOGY						
Indian Institute of Science Campus, Bangalore - 560 012 Project Proposals for Student Project Programme (SPP) 2024-25 List of Student Project Proposals Approved for Sponsorship						
SL.	PROJ. NO.	PROJECT TITLE	DEPARTMENT	PROJECT COST	SPONSOR	
484_M_3979	WEATHER PREDICTION FOR DRIVING SAFETY	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR
484_M_3980	WEATHER PREDICTION FOR DRIVING SAFETY	EE	COMPUTER SCIENCE AND ENGINEERING	Mr. RAHUL KUMAR	Rs. 10,000/-	Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR Mr. RAHUL KUMAR

15 final year B.Tech projects from the CSE Department under the KSCST SPP Scheme 2024-25 (48th Series) received funding of Rs. 64,000/- on 14th March 2024

STUDENT ACHIEVEMENTS



Ms. Vaishnavi P (ENG21CS0459), Ms. Archana B S(ENG22CS1021), Ms. Preethi V(ENG21CS0458), 8th semester Students, Department of CSE presented a paper titled “Optimizing Diabetic Retinopathy screening with Machine Learning: A data-driven approach”, under the guidance of Dr. George Fernandez I, Associate Professor, Department of CSE and Dr. Dhathri, Assistant Professor, Department of Ophthalmology, CDSIMER in the IEEE sponsored First International Conference on Frontier Technologies and Solutions (ICFTS 2025) held at St. Joseph's College of Engineering, Chennai, Tamil Nadu during 27th and 28th March 2025.



STUDENT ACHIEVEMENTS



Mr. Mohammed Arif (ENG22CS1032), Mr. Sangamesh(ENG22CS1040), Mr. Rakesh P G(ENG22CS1037) and Mr. Yashwanth G M(ENG22CS1043), 8th semester Students, Department of CSE presented a paper titled “Smart management of Crop Monitoring Using Drone Technology” , under the guidance of Dr. George Fernandez I, Associate Professor, Department of CSE in the IEEE sponsored First International Conference on Frontier Technologies and Solutions (ICFTS 2025) held at St. Joseph's College of Engineering, Chennai, Tamil Nadu during 27th and 28th March 2025.



STUDENT ACHIEVEMENTS



Mr. Vijay Kumar K S (ENG21CS0474), Mr. Vividh Salankimatt (ENG21CS0481), Mr. Vivek D K (ENG21CS0480) and Mr. Yashas M (ENG21CS0485), 8th semester Students, Department of CSE presented a paper titled “Satellite based Geographical Poverty Prediction”, under the guidance of Dr. RenukaDevi M N, Assistant Professor, Department of CSE in the IEEE sponsored First International Conference on Frontier Technologies and Solutions (ICFTS 2025) held at St. Joseph's College of Engineering, Chennai, Tamil Nadu during 27th and 28th March 2025.





DAYANANDA SAGAR
UNIVERSITY

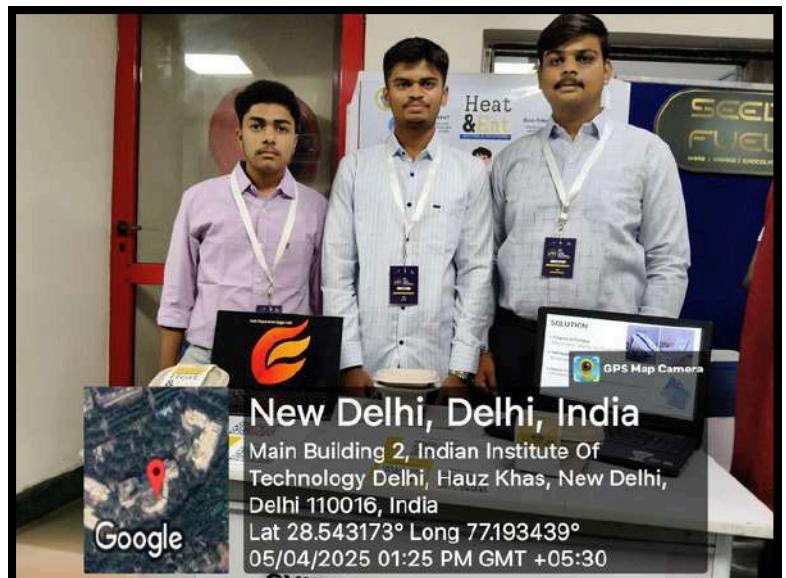
STUDENT ACHIEVEMENTS



STUDENT ACHIEVEMENTS



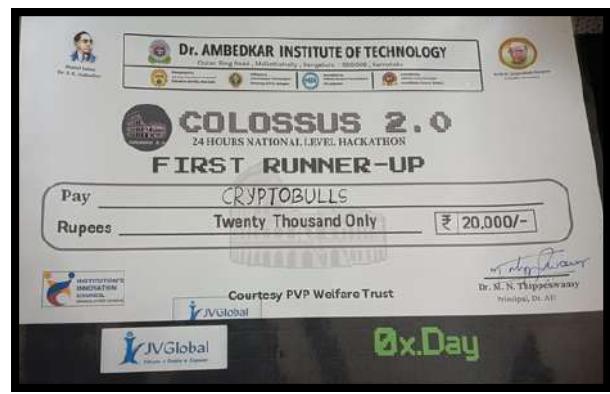
Mr. D A Ajay (ENG24CS0052) and Mr. Nithin Katariya V(ENG24CS0151) 2nd semester Students, Department of CSE presented a potential Startup Ideas Heat & Eat project, represented from E-Cell DSU at IIT Delhi, Cyi youth ideathon, selected as top 10 startup's among 50,000 startup's and secured a cash prize of ₹1,00,000 during 5th and 6th April 2025.



STUDENT ACHIEVEMENTS



Mr. Devesh Mamadapur (ENG22CS0538), Mr. Bilal Ahmed (ENG22CS0032), Mr. Punit Kumar (ENG22CS0126) and Mr. Adrian Ronan Das (ENG22CS0229), 6th Semester, Department of CSE as a team of “CRYPTO BULLS” has achieved the First Runners-Up position at the Colossus 2.0 - 24-hour National Level Hackathon, hosted by Dr. B.R. Ambedkar Institute of Technology, Bangalore on 11th and 12th April 2025. In recognition of their innovative ideas and relentless effort, the team was awarded a cash prize of ₹20,000.



STUDENT ACHIEVEMENTS



Mr. Aryan Penukonda (ENG22CS0024), Mr Pramod Gurunath Chitrapur (ENG22CS0122) and Mr. M Naveen (ENG22CS0095)" 6th Semester, Department of CSE as a team "SPAN" on the achievement of Best Business Model at the Colossus 2.0 - 24-hour National Level Hackathon, hosted by Dr. B.R. Ambedkar Institute of Technology, Bangalore on 11th and 12th April 2025. The team has been awarded a cash prize of ₹8,000 for their innovative approach.



STUDENT ACHIEVEMENTS



Mr. Syed Fuzail (ENG22CS0476), Mr. Yogesh N (ENG22AM0070), Mr. Suhaib Yasir (ENG22CS0189), and Mr. Sathish S (ENG22CS0153) 6th Semester, Department of CSE as a team developed “SahaayAI – a voice-based, emotionally intelligent AI companion designed to help senior citizens navigate digital services, access wellness support, and stay emotionally connected through familiar voices” and secured the Runner-Up position with cash prize of Rs. 8000 at the RoTech Hackathon hosted by BMS College of Engineering, a 12-hour high-intensity app development challenge themed "CRACK THE CODE", during 5th April 2025.



STUDENT ACHIEVEMENTS



Mr. Samarth Shenoy (ENG22CS0433) and Mr. Suraj S (ENG22CS0425), 6th semester Students, Department of CSE as a team “Team Bingo” participated and won Runner-Up place with cash prize of Rs. 3000 in the Great Holmes Hunt organized by ACM student Chapter, DSU Techflix, Department of CSE, Dayananda Sagar University, Harohalli on 25th and 26th April 2025.



Mr. Eeshaan Undar Bhat (ENG22CS0539), and Mr. Gagan Nagarjuna (ENG22CS0304), 6th semester Students, Department of CSE as a team “ Team Blngo” participated and won 1st place in the Triwizard Hunt with a cash prize of Rs. 15000, organized by ACM student Chapter, DSU Techflix, Department of CSE, Dayananda Sagar University, Harohalli on 25th and 26th April 2025.



Mr. Chidwan AD (ENG24CS0378), Mr. Amara Sai Asish (ENG24CS0318) 2nd semester Students, Department of CSE as a team “Team Sterlebom” participated and won 1st place with the cash prize of Rs. 12000 in the Great Holmes Hunt organized by ACM student Chapter, DSU Techflix, Department of CSE, Dayananda Sagar University, Harohalli on 25th and 26th April 2025.

STUDENT ACHIEVEMENTS



Mr. Sidmal Madhan (ENG23CS0189), Ms. Z Barkath Nisha (ENG23CS0235), Ms. Divya S (ENG23CS303), Ms. Roopa Nagaraj Doddamani (ENG23CS0166) and Ms. Maski Sneha (ENG23CS0109) 4th Semester, Department of CSE, DSU as a team "Tech Tribes" Participated in Xyntra'25 - 36 Hour Inter College Hackathon held on April 12 - 13 , 2025 at Rajalakshmi Engineering college, Chennai with the project titled "AI-powered Sign Language Translator" built to help individuals who rely on hand sign language to communicate. The Project idea was recognized as one of the six best Ideas in the hackathon.



STUDENT ACHIEVEMENTS



Mr. Sameer S Katte [ENG22CS0148], Mr.Sai Shravan V [ENG22CS0144] and Ms. Chhavi Sharma [ENG22CS0278] 6th semester Students, Department of CSE as a team “Team papz” participated in the Sentinel Hack 5.0, Hackathon Conducted at KSIT and won Runner Up position with a cash prize of Rs.15K during 28th and 29th April 2025.



Mr. Darshan B (ENG22CS0044), 6th semester Student and Mr. Shaik Saara Shireen (ENG23CS0179) 4th semester Student, Department of CSE participated in the EURAKTHON and Successfully qualifying in the final round of “EURAKTHON - Unleash Ideas and Ignite Innovation” held on 29/04/2025 at Dayananda Sagar University organized by Department of CST, School of Engineering, DSU, Harohalli.

STUDENT ACHIEVEMENTS



Mr. Aditya Choudhary (ENG22CS0518), Ms. Rashi Badiya(ENG22CS0406) and Mr. Rohan Jaiswal (ENG22CS0578), 6th semester Students, Department of CSE as a team “CoCo Coders” participated and won 1st place with cash prize of Rs.35000 with the project titled “MindBridge : Path to Cognitive Confidence” in the 24hr Hackathon(Hackin' Bad) organized by ACM student Chapter, DSU Techflix, Department of CSE, Dayananda Sagar University, Harohalli on 25th and 26th April 2025.



STUDENT ACHIEVEMENTS



Ms. Savita Chinnur(ENG22CS0156), 3rd year and Ms. Deeksha M(ENG23CS0054), 2nd Year, Department of CSE has been selected for the prestigious IEEE Women in Engineering (WIE) Scholarship for the ACY 2024-2025 and has been granted ₹50,000 each in recognition of their academic excellence and commitment.



Mr. Devesh Mamadapur (ENG22CS0538), Mr. Bilal Ahmed (ENG22CS0032), and Mr. Adrian Ronan Das (ENG22CS0229), 6th semester Students, Department of CSE as a team “CryptoBulls” participated and won 1st Runner-Up place with cash prize of Rs.25000 with the project titled “FinVault” in the 24hr Hackathon(Hackin' Bad) organized by ACM student Chapter, DSU Techflix, Department of CSE, Dayananda Sagar University, Harohalli on 25th and 26th April 2025.

STUDENT ACHIEVEMENTS



Mr. Dhiren CR(ENG21CS0115), Mr. Bhuvan J (ENG21CS0079), Mr. Abhiram DV (ENG21CS0101) and Mr. Ayush Sharma (ENG21CS0495) 8th semester Students Department of CSE under the guidance of Prof. Naitik ST, Assistant Professor Won 1st place for the project titled “Women Safety in Emerging Situation Using SOS Alerts With Integration of Biometrics and IoT” in the ProjectExpo 2K25 organized by the Department of Computer Science and Engineering, SOE, DSU on 24th May 2024.



Ms. H S Sinchana (ENG21CS0143), Ms. K Vaishnavi (ENG21CS0173) and Ms. Shambhavi Hegde (ENG21CS0371) 8th semester Students Department of CSE under the guidance of Dr.George Fernandez I, Associate Professor Won First Runner-up place for the project titled “Smart Wardrobe - MR driven virtual try on” in the ProjectExpo 2K25 organized by the Department of Computer Science and Engineering, SOE, DSU on 24th May 2024.

STUDENT ACHIEVEMENTS



Mr. Manoj S (ENG21CS0222), Mr. Kiran Gangoor (ENG21CS0189), Ms. Harshitha S (ENG21CS0154) and Ms. Kavana N (ENG21CS0184) 8th semester Students Department of CSE under the guidance of Prof . Pooja Shree H R, Assistant Professor Won Second Runner-up place for the project titled “High resolution 3D of terrain and infrastructure, Road travel conditions in Disaster struck areas” in the ProjectExpo 2K25 organized by the Department of Computer Science and Engineering, SOE, DSU on 24th May 2024.



Mr. D A Ajay (ENG24CS0052) 2nd semester , Department of CSE and the team of other branch students participated and won 2nd place with cash prize of Rs.500 in the Unlock.Ed Quiz conducted on 20th May 2025 as part of the National Technology Day celebrations by FSD Club department of CSE, SOE, DSU, Harohalli.

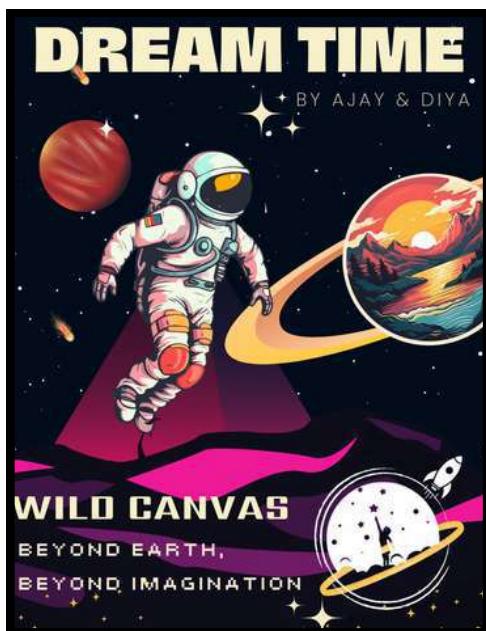
STUDENT ACHIEVEMENTS



Mr. D A Ajay (ENG24CS0052), Mr. NMK Chiranth (ENG24CS0539), 2nd Semester CSE Students collaborated with other branch students and participated in the Mini AIML hackathon conducted by Ai works club at Dayananda Sagar University. The challenge focused on key ML concepts like EDA (Exploratory Data Analysis) and Feature Engineering secured 2nd Place during 16th April 2025.



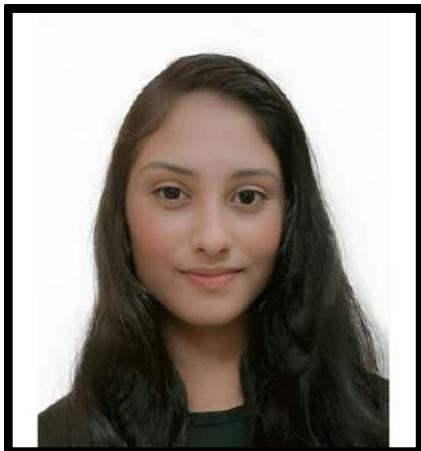
Mr. D A Ajay (ENG24CS0052), Ms. Diya D Acharya (ENG24EC0012), 2nd semester Students as team participated in the Wild Canvas: Digital Art Competition, organized under TechFlix 2025 by Department of Computer Science and Engineering, Dayananda Sagar University and Secured 1st place with cash prize of Rs.7000 on 25th April 2025.



STUDENT ACHIEVEMENTS



Mr. Sidmal Madhan (ENG23CS0189), 4th Semester, Department of CSE, DSU as a team Khatarnakgaming2580 has participated in Image AI thon - Prompt Engineering Challenge of Spring Fiesta organised by Indian Institute of Information Technology (IIIT), Surat on 5th of April 2025.



Ms. Harini Sri S (ENG22CS0314), 6th semester student Department of CSE got the 2 months Summer Internship at "Google IT Services India Pvt Ltd" with the CTC of Rs 1,65,000 as a Stipend on 15th April 2025.

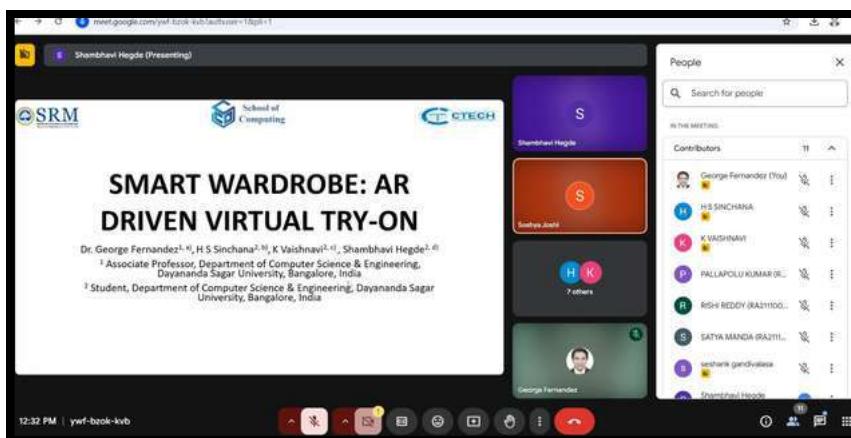


Ms. Shivani K (ENG22CS0164), 6th semester student Department of CSE, has been placed in "Vivnovation" with CTC 20 LPA and one year Internship with Rs. 15k per month as Stipend on 15th April 2025.

STUDENTS ACHIEVEMENTS



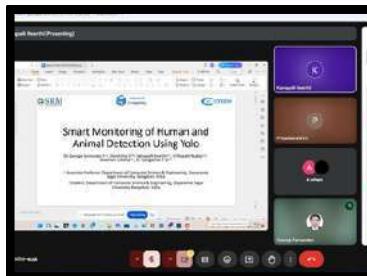
Ms. Shambhavi Hegde (ENG21CS0371), Ms. K Vaishnavi (ENG21CS0173) and Ms. H S Sinchana (ENG21CS0143) 8th semester Students, Department of CSE presented a paper titled “Smart Wardrobe: AR Driven Virtual Try - on” , under the guidance of Dr. George Fernandez I, Associate Professor, Department of CSE in the 5th International Conference on Internet of Things -ICIoT 2025, held at SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, during 2nd to 4th April 2025.



STUDENTS ACHIEVEMENTS



Ms. Kalvapalli Keerthi (ENG21CS0176), Ms. Harshitha S (ENG21CS0155), Ms. Madineni Likitha (ENG21CS0212) and Mr. V Bharath Reddy (ENG22CSI042) 8th semester Students, Department of CSE presented a paper titled “Smart Monitoring of Human and Animal Detection using yolo” , under the guidance of Dr. George Fernandez I, Associate Professor, Department of CSE in the 5th International Conference on Internet of Things -ICIoT 2025, held at SRM Institute of Science and Technology, Kattankulathur, Tamil Nadu, during 2nd to 4th April 2025.



Mr. Nandeesh P Math (ENG21CS0263), Mr. Samarth S S (ENG21CS0356), Ms. Sree Vibha G (ENG21CS0412) and Mr. Venkatesh P (ENG21CS0471), 8th semester Students, Department of CSE presented a paper titled “A comprehensive analysis on AI and ML techniques for Canine Disease Detection” , under the guidance of Dr. Sasikala N, Assistant Professor, Department of CSE in the Scopus indexed Hinweis Third International Conference on Advanced Research in Engineering and Technology (ARET) Kolkata, India online during 26-27-28 April 2025.

STUDENT ACHIEVEMENTS



Ms. Keerthana V (ENG21CS0186), Ms. Kriti Manini Raju (ENG21CS0191), Ms. Nitya A N (ENG21CS0274) and Mr. Tilak Uppar (ENG21CS0447) 8th semester Students, Department of CSE presented a paper titled “IoT Enabled Smart Container System for Pharmaceutical Supply Chain Management”, under the guidance of Prof. Mala B A, Assistant Professor, Department of CSE in the Scopus indexed Hinweis Third International Conference on Advanced Research in Engineering and Technology (ARET) Kolkata, India online during 26-27-28 April 2025.



STUDENT ACHIEVEMENTS



Ms. Naina Kalyanshetti (PH24CSPT14), Research Scholar, Dr. Praveen Kulkarni, Associate Professor, Department of CSE presented a research paper titled “Integrating Multimodal Learning for Scalable Indoor Scene Understanding” in the IEEE 3rd International Conference on Inventive Computing and Informatics (ICICI 2025) held from 4th to 6th June 2025 at S.E.A. College of Engineering and Technology, Bengaluru, Karnataka.

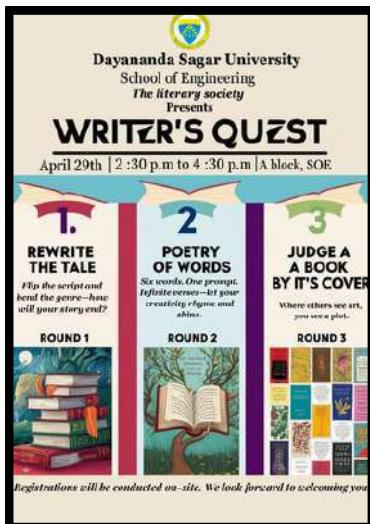


Mr. Darshan R (ENG22CS1024), Mr. Dhanush H S (ENG22CS1025), Ms. Usha Shree P (ENG21CS0453), Mr. Sandeep M Sarangamath- (ENG22CS1039) 8th semester Students, Department of CSE presented a paper titled “Innovations in AI and Assistive Technologies: Empowering the Visually Impaired”, under the guidance of Dr. Sasikala N, Assistant Professor, Department of CSE in the Scopus indexed Hinweis Third International Conference on Advanced Research in Engineering and Technology (ARET) Kolkata, India online during 26-27-28 April 2025.

STUDENT ACHIEVEMENTS



Mr. Swapnil Kashinath Kodliwadmath (ENG23CS0665), Student of 4th Semester, Department of CSE participated and Won 1st Place in Writer's Quest organized by The Literary Society, School of Engineering, DSU during 29th April 2025



Mr. Mohammad Mujeeb M Attar (ENG21CS0231), Mr. Rohan Annaso Patil (ENG21CS0340), Mr. Shariq (ENG21CS0374) and Mr. Yathish Raj S (ENG22CS1044) 8th semester Students, Department of CSE presented a paper titled “An AI-Driven Intelligent Traffic Management System Using IoT and Machine Learning for Urban Congestion Control, Accident Detection and Alert System”, under the guidance of Prof. Mala B A, Assistant Professor, Department of CSE in the Scopus indexed Hinweis Third International Conference on Advanced Research in Engineering and Technology (ARET) Kolkata, India online during 26-27-28 April 2025.

STUDENT ACHIEVEMENTS



Mr. Upamanyu Shrishanth M (ENG21CS0452), Mr. Rolwin Menezes (ENG21CS0339), Mr. Rohith Bedre (ENG21CS0338) and Mr. Puneeth M (ENG21CS0311) 8th semester Students, Department of CSE presented a paper titled “Video event localization and summarization”, under the guidance of Prof. Arpita Paria, Assistant Professor, Department of CSE in the Scopus indexed Hinweis Third International Conference on Advanced Research in Engineering and Technology (ARET) Kolkata, India online during 26-27-28 April 2025.

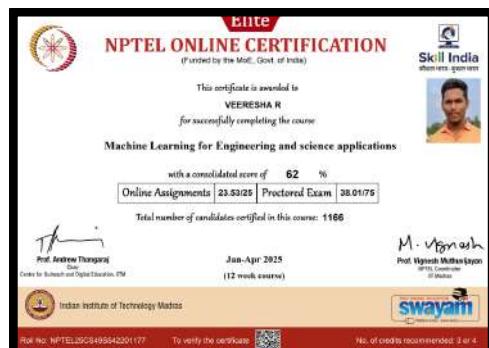


Mr. Vignesh S (ENG19CS0360) student of 2023 graduated batch and Dr. Renukadevi M N, Assistant Professor, Department of CSE published a paper in IEEE Xplore with the paper title “AttUNet : Enhancing ResUNet with Attention Mechanism for Accurate Brain Tumor Segmentation” which was presented in the IEEE Conference 2025 IEEE International Conference on Interdisciplinary Approaches in Technology and Management for Social Innovation (IATMSI) with the DOI: [10.1109/IATMSI64286.2025.10984834](https://doi.org/10.1109/IATMSI64286.2025.10984834) during 9th May 2025.

STUDENT ACHIEVEMENTS



Mr. Veerasha R (ENG22CS204), 6th Semester, Department of CSE has successfully completed 12 weeks NPTEL Online Certification courses on “Machine Learning for Engineering and science applications” with 62% and “Deep Learning” with 54% during January to April 2025.



Ms. Talupula Jahnavi (ENG22CS0478), 6th semester, Dr. Renuka Devi M N, Assistant Professor, and Mr Punith Amilineni (ENG22CS0399), 6th Semester, Department of CSE has successfully Published a research article with the title “Analysis of Fruits and Vegetable conditions using Image Processing” in Springer series “Advances in Intelligent Systems Research”, which was presented in the International Conference on Advancements in Computing technologies and Artificial Intelligence (Computatia-2025) organized by Vivekananda Global, University, Jaipur during May 2025 with DOI 10.2991/978-94-6463-700-7_21.

STUDENT ACHIEVEMENTS



Mr. A Sachin (ENG22CS0002), Mr. Pramod Gurunath Chitrapur (ENG22CS0122), Mr. Aryan Penukonda (ENG22CS0024), Mr. M Naveen (ENG22CS0095), 6th Semester CSE Students, Dr. Praveen Kulkarni, Associate Professor, Department of CSE, and in collaboration with Prof. Chandrakala B M, Department of ISE DSCE, presented a research paper titled “NAVISIGHT: A Deep Learning and Voice-Assisted System for Intelligent Indoor Navigation of the Visually Impaired” in the IEEE 3rd International Conference on Inventive Computing and Informatics (ICICI 2025) held from 4th to 6th June 2025 at S.E.A. College of Engineering and Technology, Bengaluru, Karnataka.



STUDENT ACHIEVEMENTS



Mr. Shreyas H Reddy (ENG21CS0388), Mr. Shreyas Sridhar (ENG21CS0389), Mr. Shrinikethan S(ENG21CS0392), and Mr. Sanju John (ENG21CS0361), 2025 graduated CSE Students has presented paper entitled “Emergency Traffic Prioritization System with Priority-based Dynamic Route Optimization and IoT-Enabled Dynamic Signal Control” under the guidance of Dr. Sasikala N, Assistant Professor, in the IEEE 5th International Conference on Intelligent Technologies (CONIT 2025) during 20th to 22nd June 2025.



STUDENT ACHIEVEMENTS



Ms. D N Padmashri (ENG22CS0283) , Ms. Boomika B (ENG22CS0271) , Ms. Arushi G Hiregoudar (ENG22CS0531) , and Ms. Moni Shree S (ENG22CS0372), 6th semester CSE Students has presented a paper entitled “ Comparative Analysis and Evaluation of Deep Learning Models for Efficient Waste Classification” under the guidance of Dr. Damodharan D, Assistant Professor, in the IEEE 5th International Conference on Intelligent Technologies (CONIT 2025) during 20th to 22nd June 2025.



STUDENT ACHIEVEMENTS



Ms. B Saishree (ENG22CS02600), Ms. Deepthi S V (ENG22CS0287), Ms. Deethiksha R (ENG22CS0288) and Ms. Harini Sri S (ENG22CS0314), 6th semester CSE Students has presented a paper entitled “FoodMuse: Health-Aware Food Recommendation System Using Machine Learning and API-Based Food Data” under the guidance of Dr. Damodharan D, Assistant Professor, in the IEEE 5th International Conference on Intelligent Technologies (CONIT 2025) during 20th to 22nd June 2025.



STUDENT ACHIEVEMENTS



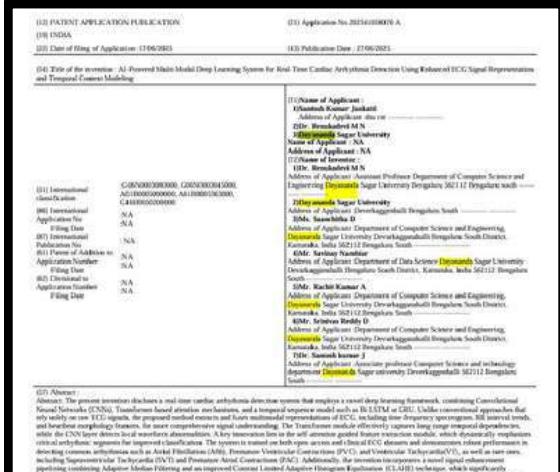
Mr. Anirudh R (ENG22CS0526), Mr. Adwaith T N (ENG22CS0520), Mr. Kedar Minesh Thaker (ENG22CS0555), and Mr. Mritunjay Kumar Singh (ENG22CS0373), 6th semester CSE Students has presented a paper entitled “2D Game Engine Design With GPU Optimization”, under the guidance of Dr. Senthil Kumar A, Professor, at 6th International Conference on Inventive Research in Computing Applications (ICIRCA 2025) organised by Department of Electrical and Electronics Engineering, RVS College of Engineering and Technology, Coimbatore, India on 25-27, June 2025.



STUDENT ACHIEVEMENTS



Ms. Disha K Nanjunda (ENG21CS0120), Ms. Diya Sujil (ENG21CS0125), Mr. Harish Sasikumar (ENG21CS0147) and Mr. Harsh Jolania (ENG21CS0148) 8th semester CSE Students has presented a paper entitled “FrameWeaver - A Virtual Storyboarding and Scene Generation Tool”, under the guidance of Prof. Shilpa Sudheendran, Assistant Professor, in the Hinweis Third International Conference on Advances in Information, Telecommunication and Computing (AITC) during May 31-1-2 June 2025.



Mr. Rachit Kumar A(ENG21CS0317), Ms. Saanchitha D (ENG21CS0350) Mr. Savinay Nambiar (ENG21CS0368) and Mr. Srinivas Reddy D (ENG21CS0415) 6th semester students, Department of CSE under the guidance of Dr Renuka Devi M N, Assistant Professor published an Indian patent with the title “AI-Powered Multi-Modal Deep Learning System for Real-Time Cardiac Arrhythmia Detection Using Enhanced ECG Signal Representation and Temporal Context Modeling.” with the application no 202541058076 and the name of the applicant Dayananda Sagar University during 27th June 2025.

STUDENT ACHIEVEMENTS



Optimizing Diabetic Retinopathy Screening with Machine Learning: A Data-Driven Approach

Preethi V¹, Archana B², Dr. George Fernandez I³, Vaishnavi P⁴, Dr. Dhathri L⁵

^{1,3,5}UoG scholar, Department of CSE, Dayananda Sagar University, Hesarhalli, Kankapura, Karnataka, India
²Associate Prof., Department of CSE, Dayananda Sagar University, Hesarhalli, Kankapura, Karnataka, India
⁴Asst. Prof., Department of Ophthalmology, Dayananda Sagar University, Hesarhalli, Kankapura, Karnataka, India

E-mail: preethivijay19@gmail.com, archanabasav@gmail.com, george.fern@daya.edu.in, vaishnavi.padas@daya.edu.in, dhathri13@gmail.com

Abstract- Diabetic Retinopathy (DR) ranks among the major causes of preventable blindness in regions with an adequate specialist-based care. A data-driven approach considers the challenges of DR, using fundus fundus images and machine learning for forecasting diabetic retinopathy. Data from clinical data is submitted in this work. A ResNet152 Convolutional Neural Network (CNN) was used for training and testing. The proposed model's performance of DR screening and an XGBoost model predicts the risk of diabetes based on input features like glucose, insulin, BMI, and age. Preprocessing involves resizing, normalization, feature extraction, and data augmentation, including Transfer learning and fine-tuning improve accuracy even with a relatively small combined dataset of retinal images and clinical health records. The found DR detection and classification accuracy is 90.5%, which is high. But can reduce the need for ophthalmologists and provide cost-efficient, effective specialist services. The automated process helps mitigate the risk of the rising prevalence of diabetes and associated complications. DR can be detected and allows only medical treatment before permanent damage to the retina. Experimental findings indicate that the integrated method attains a high accuracy rate of 98% for classification.

Keywords: Diabetic Retinopathy, Deep Learning, ResNet152, Convolutional Neural Network, Transfer Learning, Feature Scaling, Data Augmentation, Fine-Tuning, Clinical Decision Support

I. INTRODUCTION

Diabetic Retinopathy (DR) is a leading cause of blindness that occurs mainly among patients with diabetes mellitus. DR is the consequence of longstanding high blood glucose levels, leading to vascular changes and microvascular damage. If left undetected and untreated, DR can result in permanent vision loss. The disease is reported to advance by stages-Mild, Moderate, Severe, and Proliferative DR. Early detection is extremely essential to avoid further

damage to the retina. Conventional diagnosis of DR through fundus images relies on ophthalmologist interpretation, which is time-consuming, labor-intensive, and susceptible to human error. For the purpose of increasing efficiency and accuracy, automated systems based on deep learning techniques such as CNN have been proposed for DR detection.

This work's contribution includes designing a CNN-based system based on preprocessing methods, such as Frangi filtering and CLAHE, to enhance vessel visibility. A refined ResNet-55 model will be used to classify DR for grading levels with good accuracy. Also, an XGBoost-based model for diabetes prediction is employed. The input features of the diabetes prediction model are categorical parameters such as glucose, insulin, BMI, and age. Together, both models form an integrated screening solution. If diabetes is anticipated, then fundus imaging is suggested for DR screening, and vice versa. The proposed system enables early detection and allows for timely medical intervention to reduce the burden of diabetic complications worldwide. From Figure 1, the stages of diabetic retinopathy which are classified namely are Normal, Mild, Moderate, Severe and Proliferative.

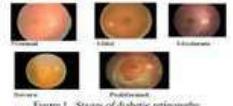


Figure 1. Stages of diabetic retinopathy

Ms. Vaishnavi P (ENG21CS0459), Ms. Archana B S(ENG22CS1021), Ms. Preethi V(ENG21CS0458), 2025 passed out Students, Department of CSE published a paper in the IEEE titled "Optimizing Diabetic Retinopathy screening with Machine Learning: A data-driven approach", under the guidance of Dr. George Fernandez I, Associate Professor, Department of CSE and Dr. Dhathri, Assistant Professor, Department of Ophthalmology, CDSIMER during June 2025, which was presented in the IEEE sponsored First International Conference on Frontier Technologies and Solutions (ICFTS 2025) held at St. Joseph's College of Engineering, Chennai, Tamil Nadu.

Smart Management of Crop Monitoring Using Drone Technology

Dr. George Fernandez I¹, Yashwanth G M², Dr. Gopal Sharma R Jod³, Sangamesh Lingayath⁴, Rakesh Prabhakar Gond⁵, Mohammed Arif⁶

^{1,2,3,4,5}Department of CSE, Dayananda Sagar University, Hesarhalli, Kankapura, Karnataka, India
⁶Department of CSE, Dayananda Sagar University, Kudlur, Hesarhalli, Karnataka, India

E-mail: george.fern@daya.edu.in, yashwanthgond211995@gmail.com, mohamedarif12@gmail.com

Abstract- Agriculture is a critical industry facing challenges such as early disease detection, inefficient pest control, and excessive chemical pesticide use, which lead to soil degradation and environmental pollution. In this work, we propose a smart crop monitoring system that leverages AI, IoT, and drone technology to provide real-time disease detection and monitoring of agricultural plants. Deep learning models are used to analyze images of healthy and diseased plants. The proposed system uses a hybrid deep learning model to automate disease identification and pesticide recommendations, with a strong emphasis on early disease detection. The proposed system uses a hybrid deep learning model to automate disease identification and pesticide recommendations, with a strong emphasis on early disease detection. The proposed system uses a hybrid deep learning model, where adapted images are preprocessed and then fed into a pre-trained Transfer-Lite model. The predicted disease, along with its location and recommended treatments, is stored in MongoDB. Over time, the cloud model continuously updates the database, improving future predictions. A mobile application developed in React Native retrieves data via APIs, allowing users to monitor real-time disease alerts, affected plant locations, and pesticide recommendations, prioritizing regions that require more attention. Experimental results demonstrate high efficiency, with our deep learning model achieving an accuracy of 98% and a mean loss of 2.3. This work's proposed system provides accurate classification and reliable predictions. This intelligent system provides modernizing agriculture and enhancing crop health management.

Keywords: Smart Agriculture, Drone Technology, Plant Disease Detection, Geo-location Tracking, Cloud Computing, Precision Farming, Sustainable Agriculture, AI in Agriculture

I. INTRODUCTION

Agriculture is a vital industry facing significant

challenges such as early disease detection, ineffective pest control, and the overuse of chemical pesticides. Traditional crop monitoring methods are labor-intensive, time-consuming, and often result in delayed identification of plant diseases, leading to severe yield losses. With the advancement of precision agriculture, harnessing the power of AI, IoT, and drone, systematic revolutionize crop monitoring by providing automated, real-time, and accurate data analysis. The system focuses on developing an intelligent crop monitoring system using drone-based imaging, Raspberry Pi, GPS, and deep learning models. The system efficiently detects plant diseases, tracks affected areas, and suggests targeted treatments for agricultural organizations to promote sustainable farming. A locally deployed Transfer-Lite model on Raspberry Pi ensures real-time disease classification.

II. RELATED WORK

Drones are essential to automated agricultural surveillance because they can detect plant diseases by taking high-resolution photos. An AI-based drone system employing an upgraded CNN model for plant disease detection was proposed by Alshabani et al. [10] with increased accuracy. The geolocation tracking of impacted crops, which is incorporated into our system, is absent from their work, though. A UAV-based smart agriculture platform with wireless sensor network (WSN) for real-time data collection was proposed by Li et al. [2]. Although useful, the study did not concentrate on our system's ability to classify diseases and recommend pesticides in order to detect plant illnesses. Bharathiraja et al. [3] proposed a drone-assisted image processing system for reverbentions, where decision-making was challenging because manual involvement was required for analysis. Our method

Mr. Mohammed Arif (ENG22CS1032), Mr. Sangamesh(ENG22CS1040), Mr. Rakesh P G(ENG22CS1037) and Mr. Yashwanth G M(ENG22CS1043), 2025 passed out Students, Department of CSE published a paper in the IEEE titled "Smart management of Crop Monitoring Using Drone Technology", under the guidance of Dr. George Fernandez I, Associate Professor, Department of CSE during June 2025, which was presented in the IEEE sponsored First International Conference on Frontier Technologies and Solutions (ICFTS 2025) held at St. Joseph's College of Engineering, Chennai, Tamil Nadu.

STUDENT ACHIEVEMENTS



Satellite Based Geographical Poverty Prediction

Vividh Salankimatt, Dr. Renuka Devi M N, Yashas M, Vivek D K, Vijay Kumar K S

Computer Science and Engineering, Dayananda Sagar University, Bangalore, India

Abstract: Poverty in the world remains more challenging than traditional methods of assessment such as survey data. It can be logically difficult to conduct surveys, where they need to assign a few people to perform surveys and to store, backup, and maintain the data. In addition, the survey data collected during surveys might miss some of the regions or houses during the survey which might lead to inaccurate results because the survey data might miss some of the houses might be the key factors to determine the poverty and performing these surveys might be time-consuming. Our proposed model uses satellite imagery and satellite images to find the solution for the problem faced using the ground survey data where the model is trained using multi-class classification. The model is trained using trained using CNN transfer learning algorithm such as ResNet-A and UNet algorithms which help in classifying the images into different categories such as buildings, roads, water resources, vegetation, and improved land; these features will be extracted. These features will be used to train the model, and the data will be classified into above-poverty, average-poverty, or below-poverty classes. The model helps in providing socio-economic conditions for the poverty assessment and this helps in eliminating the need for ground-level survey data. By providing insights about the images, the model helps in identifying the areas and allocate the resources based on the insights provided by the model and the use of satellite imagery ensures regular updates of the data. Thus, the proposed model provides a reliable and accurate poverty prediction contributing to global efforts in reducing the poverty and improving the quality of life. This model not only addresses the limitation of the traditional method but also makes us understand the different ways to use the remote sensing images effectively.

II. RELATED WORKS

We did research and read papers to use for our project. In research, we came across the features used for poverty estimation and many algorithms that could be used in order to obtain better data.

[1] In this context of satellite imagery and machine learning, specifically Support Vector Machine (SVM) and K-nearest neighbors (KNN) are the algorithms that are used to predict the poverty areas. Features such as NDVI, NDVI, population density, entropy are extracted from a distance of 1 kilometer from the ground level. Support Vector Machine

Mr. Vijay Kumar K S (ENG21CS0474), Mr. Vividh Salankimatt (ENG21CS0481), Mr. Vivek D K (ENG21CS0480) and Mr. Yashas M (ENG21CS0485), 2025 passed out Students, Department of CSE published a paper in the IEEE titled “Satellite based Geographical Poverty Prediction”, under the guidance of Dr. Renuka Devi M N, Assistant Professor, Department of CSE during June 2025, which was presented in the IEEE sponsored First International Conference on Frontier Technologies and Solutions (ICFTS 2025) held at St. Joseph's College of Engineering, Chennai, Tamil Nadu.