Geethanjali College of Engineering and Technology
(UGC Autonomous Institution)
Cheeryal (V), Keesara (M), Medchal-Malkajgiri Dist., Telangana - 501 301
(Approved by AICTE, Permanently Affiliated to JNTUH,
Accredited by NAAC with 'A+' Grade, Accredited by NBA, ISO 9000:2008 Certified)
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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

TECH EPISTLE

NEWSLETTER

VOLUME 13, ISSUE 2
JANUARY - JUNE 2025

Volume 13, Issue 2 January 2025 to June 2025

TechEpistle

Newsletter from Department of CSE

Geethanjali College of Engineering and Technology

(UGC Autonomous, Approved by AICTE and Permanently Affiliated to JNTUH)
(Accredited by NAAC with 'A+' Grade and Accredited by NBA)

Inside the Issue

Vision of the Department

- To produce globally competent and socially responsible computer science engineers contributing to the advancement of engineering and technology which involves creativity and innovation by providing excellent learning environment with world class facilities.

Mission of the Department

- To be a centre of excellence in instruction, innovation in research and scholarship, and service to the stake holders, the profession, and the public.
- To prepare graduates to enter a rapidly changing field as a competent computer science engineer.
- To prepare graduate capable in all phases of software development, possess a firm understanding of hardware technologies, have the strong mathematical background necessary for scientific computing, and be sufficiently well versed in general theory to allow growth within the discipline as it advances.
- To prepare graduates to assume leadership roles by possessing good communication skills, the ability to work effectively as team members, and an appreciation for their social and ethical responsibility in a global setting.

CSE Department Highlights (Jan - June 2025)

- The competent authority of the **National Board of Accreditation (NBA)** has granted further **accreditation to the B.Tech in Computer Science and Engineering (UG - CSE) program** offered by Geethanjali College of Engineering and Technology, **extending its validity for a period of three academic years** from 2025–2026 to 2027–2028, i.e., up to 30th June, 2028.

- **Ms. Pallavi Kumari (21R11A05Q0)** secured an **internship** opportunity at **Catalog** with a monthly stipend of Rs.21,000 and she received a **placement offer** from the same organization with an annual package of **Rs. 25 Lakhs Per Annum.**

- **Ms. Rithika Mammila (21R11A05D0)** has secured a **placement offer** from **Zeta** with an annual package of **Rs.16 Lakhs Per Annum.**

- **Mr. Ch.Sarswathi Lalith (22R11A05A4) secured an internship** opportunity at **ServiceNow** with a monthly stipend of **Rs. 89,000** during May - July 2025.

- **Centre of Excellence for AI, Robotics & Drones** was established in **collaboration with BDS Education** on 30th June, 2025.

- Three faculty members from the Department of CSE successfully completed their **Ph.D. degrees** during January – June 2025. **Dr. J.Sudhakar** completed his Ph.D. in the research area of **Data Mining** and **Dr. G. Krishna Lava Kumar** completed his Ph.D. in the research area of **Machine Learning** and **Dr. M. Srinivas** completed his Ph.D. in the research area of Natural Language Processing.

Faculty Achievements

- **Dr. J.Sudhakar,** Associate Professor, Department of CSE, was **awarded a Ph.D Degree** in the research area of "Data Mining", for his thesis titled "Exploring Spatial Data using Collaborative Spatial Query Recommendation with Meta Heuristic Technique" from Jawaharlal Nehru Technological University, Hyderabad, on 24th December, 2024.
- **Dr. G.Krishna Lava Kumar,** Associate Professor, Department of CSE, was **awarded a Ph.D Degree** in the research area of "Machine Learning", for his thesis titled "Optimizing Cardiovascular Disease Prediction through Hybrid Deep Learning Models" from Kalasalingam University, TamilNadu, on 10th January, 2025.
- **Dr. M.Srinivas,** Associate Professor, Department of CSE, was **awarded a Ph.D. degree** in the research area of "Natural Language Processing" for his thesis titled "Word Sense Disambiguation for Telugu using Word and Sense Embeddings" from Jawaharlal Nehru Technological University, Hyderabad, on 21st June, 2025.
- **Dr. K.Raghu,** Associate Professor, acted as a **session chair** for the International Conference on "Artificial intelligence and machine learning for sustainable development" organized at Malla Reddy Engineering College on 21st and 22nd February, 2025.
- **Dr. S.Radha,** Associate Professor, acted as **reviewer** for 2nd International Conference on "Renewable Energy, Green Computing & Sustainable Development" (ICREGCSD-2025) organized by EEE Department, CVR College of Engineering, Hyderabad during 21st to 22nd February, 2025.

Faculty Patents Published during January - June 2025

S.No.	Faculty Name	Title of the Patent	Application Number	Field Of Invention	National/ International	Month & Year of Publication
1.	Ms.V. Sravanthi	Optimized SMOTE and Deep Learning for Early Cardiovascular Disease Detection	202541018685A	Deep Learning	National	14-March-2025
2.	Ms. Sudha Singaraju	AI Driven Adaptive Load Balancing System In Cloud Networks	202541019472	Artificial Intelligence	National	21-March-2025
3.	Ms. K. Ashwini	Building A Plant Species Identification Algorithm With Machine Learning	202541041131A	Machine Learning	National	23-May-2025
4.	Mr. Bh. Bhujanga Reddy	"A System And Method For Automated Tumor Detection And Classification In Histo pathological Images Using Artificial Intelligence "	202541040854A	Artificial Intelligence	National	23-May-2025

Sponsored Research and Consultancy Projects

Name of the Project Investigator	Project title	Start Date	Completion Date	Duration	Project Cost (Rs.)	Sponsoring Organization
Dr.Kamakshaiah Kolli, Professor Dr.A.Hariprasad Reddy, Professor	Biometric-Atm: accept the biometric input and complete all banking process	28-11-2024	05-04-2025	5 Months 9 Days	6,00,000/-	Advaita Global IT Labs Pvt.Ltd

Faculty Book Chapters Published

S.No.	Faculty Name	Book Chapter Title	Publisher Name	Year	ISBN	National/ International
1	Dr.Puja S Prasad	Beyond Single Modalities: A Guide to Multimodal Biometric: Integrating Diverse Modalities for Enhanced Security and Authentication	Eliva Press	Jan, 2025	ISBN-10: 9999323472 ISBN-13 : 978-9999323475	International
2	Dr. Neha Nandal	A Multimodal Sentiment Analysis Framework for Textual and Visual Cues	CRC Press	Feb, 2025	9781003504832 & 1st Edition	International

Faculty Qualified in SWAYAM NPTEL Courses during January – June 2025

S.No.	Faculty Name	Course Name	Score	Certificate Type	No. of Weeks	Timeline
1	Ms. P.Deeplaxmi	Design Thinking - A Primer	83	Elite+Silver	4 weeks	Jan-Mar 2025
2	Dr. S. Vish-wanath Reddy	Python for Data Science	75	Elite+Silver	4 weeks	Jan-Mar 2025
3	Dr. S. Vish-wanath Reddy	Design and analysis of algorithms	83	Elite+Silver	8 weeks	Jan-Mar 2025
4	Mr. Yenikepalli Siva	Introduction to Internet of Things	87	Elite+Silver	12 weeks	Jan-Apr 2025
5	Ms. G. Swapna Rani	Data Analytics with Python	82	Elite+Silver	12 weeks	Jan-Apr 2025
6	Ms. Andavolu Durga Pavani	Data Analytics with Python	77	Elite+Silver	12 weeks	Jan-Apr 2025
7	Ms. Vudutha Sravanthi	Data Analytics with Python	66	Elite	12 weeks	Jan-Apr 2025
8	Ms. P.Sonam	Python for Data Science	63	Elite	4 weeks	Jan-Mar 2025
9	Ms. K.Durga Kalyani	Graph Theory	60	Elite	8 weeks	Jan-Mar 2025
10	Ms. G.Swapna Rani	Graph Theory	68	Elite	8 weeks	Jan-Mar 2025
11	Ms. Vudutha Sravanthi	Graph Theory	70	Elite	8 weeks	Jan-Mar 2025
12	Ms.G. Swapna Rani	Programming, Data Structures And Algo-rithms Using Python	68	Elite	8 weeks	Jan-Mar 2025
13	Ms. Niveditha Chereuku	Computer Vision And Image Processing - Fun-damentals And Applica-tions	64	Elite	12 weeks	Jan-Apr 2025
14	Dr.Radha Seelaboyina	Blockchain and its Applications	60	Elite	12 weeks	Jan-Apr 2025
15	Ms. Jyotsna Tarigoppula	Blockchain and its Applications	61	Elite	12 weeks	Jan-Apr 2025
16	Ms. Kantimahanti Padmaja	Discrete Mathematics	62	Elite	12 weeks	Jan-Apr 2025

Faculty Qualified in SWAYAM NPTEL Courses during January - June 2025

S.No.	Faculty Name	Course Name	Score	Certificate Type	No. of Weeks	Timeline
17	Ms.Vijaya Alukapelly	Cloud Computing	69	Elite	12 weeks	Jan-Apr 2025
18	Ms.Aenugu Shiva jyothi	Cloud Computing	62	Elite	12 weeks	Jan-Apr 2025
19	Ms. Vudutha Sravanthi	Theory of Computation	72	Elite	12 weeks	Jan-Apr 2025
20	Ms.P. Shobarani	Compiler design	65	Elite	12 weeks	Jan-Apr 2025
21	Ms. Morigadi-Vishwashanthi	Design Thinking - A Primer	58	Successfully completed	4 weeks	Jan-Mar 2025
22	Ms. K.Durga Kalyani	Discrete Mathematics	55	Successfully completed	12 weeks	Jan-Apr 2025
23	Mr.E.Mahender	Computer Vision And Image Processing - Fundamentals And Applications	58	Successfully completed	12 weeks	Jan-Apr 2025
24	Ms. R.Sukrutha	Blockchain and its Applications	54	Successfully completed	12 weeks	Jan-Apr 2025

Student Achievements

- **Ms.Nethi Chakrika(23R11A05M0), Ms.Rishitha(23R11A05L9),Ms.Bhoomika (23R11A05K2),** and **Ms.Akshara (23R11A05N5)** secured a **Consolation Prize** and received a **cash prize of Rs.5000** at the **"AI Autonomous Hackathon",** held on 6th and 7th February 2025. The event was organized by Siddhartha Academy of Higher Education (Deemed-to-be University), Vijayawada.

AI Autonomous Hackathon event

- **Mr. Sri Vardhan (21R11A0G4)** and **Mr. K.Preetham Reddy (21R11A0G9)** participated in a **paper presentation** competition at **Technostav'24,** held on 22nd February, 2025 at Sri Indu College of Engineering & Technology, Hyderabad. The team **secured Second Place** and received with a **cash prize of Rs.2000** for their outstanding performance.

Technostav'24: paper presentation competition

Student Achievements

- **Ms. Pallavi Kumari (21R11A05Q0)** secured an **internship opportunity at Catalog** with a monthly stipend of Rs. 21,000 and she received a **placement offer** from the same organization with an **annual package of Rs. 25 LPA.**
- **Ms. Rithika Mammila (21R11A05D0)** has secured a **placement offer from "Zeta"** with an **annual package of Rs.16 LPA.**

- **Mr.Ch.Sarswathi Lalith (22R11A05A4)** secured an **internship** opportunity at **ServiceNow** with a monthly **stipend of Rs. 89,000** during May - July 2025.
- **Mr. G. Srinivas Kaushik (21R11A05C3)** has successfully **qualified in GATE 2024** examination and secured an **All India Rank of 4809** in Computer Science and Information Technology (CS).
- **Ms. Dasari Abhaya Manasa(21R11A05C0)** has successfully **qualified in GATE 2025** examination and secured an **All India Rank of 5844** in Computer Science and Information Technology.
- **Mr. Satyamdas (21R11A05E5)** has successfully **qualified in GATE 2025** examination and secured an **All India Rank of 12301** in Computer Science and Information Technology.
- **Mr. Ch. Sarswathi Lalith (22R11A05A4)** has successfully **qualified in GATE 2025** examination and secured an **All India Rank of 14740** in Computer Science and Information Technology.

Student Qualified in SWAYAM NPTEL Courses during January – June 2025

S.No.	Student Name	Roll Number	Course Name	Score	Certificate Type	No. of Weeks	Timeline
1	Dintakurthi venkata sai saketh	22R11A0512	Programming in Java	86	Elite+Silver	12 weeks	Jan-Apr 2025
2	Rithwick Reddy Atmakuru	23R11A05E3	The Joy of Computing using Python	79	Elite+Silver	12 weeks	Jan-Apr 2025
3	Manoj Kumar	22R11A0532	Programming in JAVA	77	Elite+Silver	12 weeks	Jan-Apr 2025
4	Nallapati Nikhil Sai	22R11A0529	Cloud Computing	63	Elite	12 weeks	Jan-Apr 2025
5	Neha Nalivela	23R11A05G7	Design Thinking - A Primer	61	Elite	4 Weeks	Jan-Mar 2025
6	Ganta Sai Charan Reddy	24R11A05T6	Introduction to Graphic Design	63	Elite	8 Weeks	Jan-Apr 2025
7	Salveru Vedanth Kumar	22R11A0535	Programming in Java	60	Elite	12 weeks	Jan-Apr 2025
8	Samala Saiteja	22R11A0536	Programming in Java	67	Elite	12 weeks	Jan-Apr 2025
9	Boddepalli Sravan Kumar	22R11A0508	Programming in Java	67	Elite	12 weeks	Jan-Apr 2025
10	Relangi Mahathi	24R11A0590	Problem Solving Through Programming in C	66	Elite	12 weeks	Jan-Apr 2025
11	Komati Nanda Kishore	24R11A05J1	Problem Solving Through Programming in C	60	Elite	12 weeks	Jan-Apr 2025
12	Pavan malji	24R11A0586	Problem Solving Through Programming in C	65	Elite	12 weeks	Jan-Apr 2025
13	Vidhi Patel	24R11A0551	Problem Solving Through Programming in C	65	Elite	12 weeks	Jan-Apr 2025
14	Hari Vallabha	24R11A0509	Problem Solving Through Programming in C	66	Elite	12 weeks	Jan-Apr 2025

Student Qualified in SWAYAM NPTEL Courses during January – June 2025

S.No.	Student Name	Roll Number	Course Name	Score	Certificate Type	No. of Weeks	Timeline
15	Rithwick Reddy Atmakuru	23R11A05E3	Problem Solving Through Programming in C	68	Elite	12 weeks	Jan-Apr 2025
16	Mr. Katta Soumith Kumar	22R11A0521	Programming in JAVA	58	Successfully Completed	12 weeks	Jan-Apr 2025
17	SripadGour Raj Rangappagari	23R11A05Q1	Design and analysis of algorithms	41	Successfully completed	8 Weeks	Jan-Mar 2025
18	Bommana Jaya Sree	22R11A0553	Data Base Management System	50	Successfully completed	8 Weeks	Jan-Mar 2025
19	Rishith Kumar Guntuka	24R11A0571	Problem Solving Through Programming in C	56	Successfully completed	12 weeks	Jan-Apr 2025
20	B. Abhilash	24R11A05FU	Problem Solving Through Programming in C	55	Successfully completed	12 weeks	Jan-Apr 2025
21	Chintalapati Lasya Krishnaja	24R11A05Y9	Introduction to Large Language Models (LLMs)	57	Successfully completed	12 weeks	Jan-Apr 2025
22	Thumma Akash	24R11A05l1	Problem Solving Through Programming in C	54	Successfully completed	12 weeks	Jan-Apr 2025
23	Kothuri Sri Lalitha	24R11A05ER	Problem Solving Through Programming in C	53	Successfully completed	12 weeks	Jan-Apr 2025
24	Tagaram Sai Kushal	24R11A05L0	Problem Solving Through Programming in C	56	Successfully completed	12 weeks	Jan-Apr 2025
25	B V S Pavan Sreekar	24R11A0501	Problem Solving Through Programming in C	53	Successfully completed	12 weeks	Jan-Apr 2025
26	Rithwick Reddy Atmakuru	23R11A05E3	Introduction to Database Systems	49	Successfully completed	12 weeks	Jan-Apr 2025
27	Nallavelli Gowthami	22R11A0530	Cloud Computing	57	Successfully completed	12 weeks	Jan-Apr 2025

Student Qualified in SWAYAM NPTEL Courses during January – June 2025

S.No.	Student Name	Roll Number	Course Name	Score	Certificate Type	No. of Weeks	Timeline
28	B Nikhila	24R11A05Y4	Linear programming and its applications to computer science	50	Successfully completed	8 weeks	Jan-Apr 2025
29	Cheguri Sathwika	24R11A05Y7	Linear programming and its applications to computer science	47	Successfully completed	8 weeks	Jan-Apr 2025

Students Qualified in GRE/TOEFL/Others during Jan - June 2025

S. No.	Roll Number	Name of the Student	Name of the Exam Qualified
1	21R11A05Q2	Pasala Mary Niharika	GRE & TOEFL
2	21R11A05K7	Sodgam Sai Durga Bhavani	TOEFL
3	21R11A0579	K. Mysanthosh	PTE
4	21R11A05K1	RathodPoojitha	IELTS
5	21R11A0520	GurramYeshwanth Reddy	MOI Basic
6	21R11A05L8	Appala Karthik	IELTS
7	21R11A05P5	Mohammed Abdul Saad	IELTS
8	21R11A0593	Pathuri Sai Vardhan Reddy	IELTS
9	21R11A05C3	Ganti Srinivas Koushik	GATE
10	22R15A0517	N. Maneesha	GRE

Student Certification Courses during Jan - June 2025

S.No.	Course Name	Number of Students Completed	Course offered by	Year/Sem
1.	C Essentials	508	CISCO - CCNA	I Year II semester
2.	Introduction to IoT and Digital Transformation	341	CISCO - CCNA	III Year II semester

Coding Club Activities

- **CodeSprint 3.0**, a prestigious national-level coding contest, was successfully organized by the Coding Club of GCET from 1st to 4th April, 2025. The event attracted participation from 240 students, showcasing their programming skills and problem-solving abilities in a competitive environment. The top 10 performers of the contest were awarded **a total cash prize of Rs.2,20,000.** The contest served as an excellent platform for budding programmers to demonstrate their technical expertise, creativity, and competitive spirit.
- The event was meticulously coordinated by the following faculty members:
  Ms. M. Keerthi, Assistant Professor, Department of CSE (IoT)
  Mr. S. Ramanjaneyulu, Assistant Professor, Department of CSE
  Mr. A. Srinivas, Department of CSE
  Mr. P. Chandra Sekhar Reddy, Department of CSE.

Code Sprint 3.0 Winners List

S.No.	Student Name	Roll Number	Year	Branch	College Name	Cash Prize (Rs.)	Prize Won
1	Beta Harshith	22H51A6207	III	CSE (CS)	CMR College of Engineering and Tech.	100000	I
2	Tummala Naveen	22071A6660	III	CSE-AIML	VNR Vignana Jyothi Institute of Engineering and Technology (VNR VJIET)	50000	II
3	Julakanti Harshith Reddy	23B81A0578	II	CSE	CVR College Of Engineering	25000	III
4	Devara Shashank	21R11A6919	IV	CSE - IoT	Geethanjali College of Engineering and Technology	10000	IV
5	R Venkata Giridhar	22071A05Q8	III	CSE	VNR VJIET	10000	V
6	Vallapuri-Greeshmanth	22071A6761	III	CSE - DS	VNR VJIET	5000	VI
7	Rajesh Gundu	22AG1A6692	III	CSE-AI&ML	ACE Engineering College	5000	VII
8	Shailesh Reddy K	22071A6625	III	CSE-AIML	VNR VJIET	5000	VIII
9	Divite Dinesh	229X1A33A4	III	CSE - AIML	G Pullareddy Engineering College	5000	IX
10	Mandha-Ruchith	21R11A05D3	IV	CSE	Geethanjali College of Engineering and Technology	5000	X

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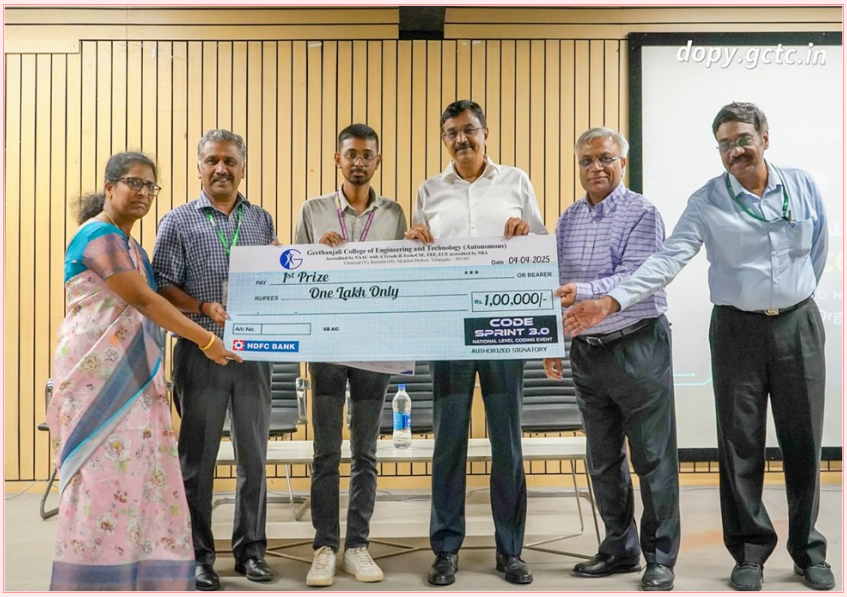
Coding Club Activity: CodeSprint 3.0



Mr. B. Harshith awarded with cash prize of one lakh Rupees.

విజయవంతంగా "కోడ్ స్ప్రింట్ 3.0"

జాతీయ స్థాయి కోడింగ్ పోటీ

గీతాంజలి ఇంజినీరింగ్ అండ్ టెక్నాలజీ కళాశాలలో అద్భుత వేదిక

హైదరాబాద్, ఏప్రిల్ 05, తెలంగాణ దిశ: గీతాంజలి ఇంజినీరింగ్ అండ్ టెక్నాలజీ కళాశాల కోడింగ్ క్లబ్ ఆధ్వర్యంలో నిర్వహించిన జాతీయ స్థాయి కోడింగ్ పోటీ "కోడ్ స్ప్రింట్ 3.0" విజయవంతంగా ముగిసింది. ఈ పోటీలో దేశంలోని ప్రముఖ ఇంజినీరింగ్ కళాశాలల నుండి ప్రతిభావంతులైన విద్యార్థులు చురుకుగా పాల్గొన్నారు. మొత్తం 235 మంది విద్యార్థులు ఈపోటీలో శ్రద్ధగా పాల్గొన్నారు. అందులో 132 మంది గీతాంజలి కళాశాల విద్యార్థులు, మిగతా 103 మంది విద్యార్థులు 34 ఇతర ఇంజినీరింగ్ కళాశాలల నుండి హాజరయ్యారు. మొదటి రెండు రౌండ్లు ఆన్‌లైన్‌లో నిర్వహించబడగా, తుది రౌండ్ గీతాంజలి కళాశాల క్యాంపస్‌లో ప్రత్యక్షంగా జరిగింది."కోడ్ స్ప్రింట్ 3.0" పోటీ ముగింపులో టాప్ 10 విజేతలకు నగదు బహుమతులు ప్రధానం చేశారు. మొత్తం రూ.2,20,000 విలువైన బహుమతులను అందజేశారు ప్రథమ బహుమతిగా రూ. లక్ష, ద్వితీయ బహుమతిగా రూ.50 వేలు, తృతీయ బహుమతిగా రూ.25 వేలు, 4,5వ స్థానాలలో నిలిచిన వారికి రూ.10 వేల చొప్పున బహుమతులను అందజే శారు. అదే విధంగా 6 నుండి 10వ స్థానాలలో నిలిచిన ప్రతి ఒక్కరికి రూ5చొప్పున బహుమతులను అందజేశారు. ఈ కార్యక్రమానికి బలమైన రూపకల్పనను అందించిన కోడింగ్ క్లబ్ కన్వీనర్ డాక్టర్ ఎ. శ్రీలక్ష్మి నేతృత్వంలో ఫ్యాకల్టీ కో ఆర్డినేటర్లు కీర్తి, ఎంఎస్. రామాంజనే యులు, ఎ. శ్రీనివాసరావు, పి. చంద్రశేఖర్ సమన్వయంతో పాలుపంచు కున్నారు. ఈ కార్యక్రమాన్ని విజయవంతంగా నిర్వహించడంలో కీలక పాత్ర వహించిన విద్యార్థి కో ఆర్డినేటర్లు, వాలంటీర్లకు మనస్ఫూర్తిగా కృతజ్ఞతలు తెలిపారు.

ఈ విజయవంతమైన ఈవెంట్‌కు ప్రేరణ నిచ్చిన ప్రిన్సిపాల్ డాక్టర్ కె.సాగర్, డైరెక్టర్ డాక్టర్ ఉదయ కుమార్ సుసర్ల అందించిన మార్గదర్శకతకు మనస్ఫూర్తిగా కృతజ్ఞతలు తెలిపారు. అలాగే ఈ కార్యక్రమాన్ని అత్యున్నతంగా విజయవంతం చేసుకోవడంలో ముఖ్యపాత్ర వహించిన వైస్ చైర్మన్ కె. హరీష్ చంద్ర రెడ్డి, ఆధ్యాత్మిక ప్రేరణ శక్తిగా నిలిచిన చైర్మన్ జిఆర్.రవీందర్ రెడ్డికి హృదయపూర్వక కృతజ్ఞతలు తెలిపారు. ఈకార్యక్రమాన్ని విజయవంతంగా నిర్వహిం చడానికి ఆయన అందించిన ప్రేరణ, సహాయం, మార్గదర్శనం, ప్రోత్సాహం అమూల్య మైనవని అన్నారు. కోడ్ స్ప్రింట్ 3.0 పోటీనిఅత్యుత్తమంగా నిర్వహించేందుకు వారి వేదికను అందించిన స్మార్ట్‌ఇంటర్వ్యూస్ సంస్థకు హృదయపూర్వక కృతజ్ఞతలు తెలిపారు. ఈ పోటీగీతాంజలి ఇంజినీరింగ్ అండ్ టెక్నాలజీ కళాశాల విద్యార్థు లు కాకుండా, దేశవ్యాప్తంగా ఉన్న కోడింగ్ అభిమాని విద్యార్థులందరికీ ప్రతిభను చాటుకునే అద్భుత వేదికగా నిలిచింది.

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Blockchain Club Activity

- The **Blockchain Club** of Geethanjali College of Engineering and Technology, under the Department of Computer Science and Engineering, organized an event titled **"INNOBLOCK-25"** inter-college Blockchain event and Ideathon, held from 5th to 6th March 2025. The Coordinator for the event was Dr. A. Hariprasad Reddy, Associate Professor, CSE Department.
- As part of the event, a series of insightful sessions were conducted, including a blockchain-focused workshop led by **Mr. Siv Ram Shastri, Co-Founder of Hyderabad DAO,** who shared his expertise on decentralized technologies and real-world blockchain applications. The Ideathon aimed to foster innovation and problem-solving among students by encouraging them to develop blockchain based solutions to real-world challenges. It provided a platform for participants to collaborate, ideate, and pitch their ideas, promoting creative thinking and entre-preneurship in the blockchain domain.

"INNOBLOCK-25" inter-college Blockchain event

ROBOTICS CLUB ACTIVITIES

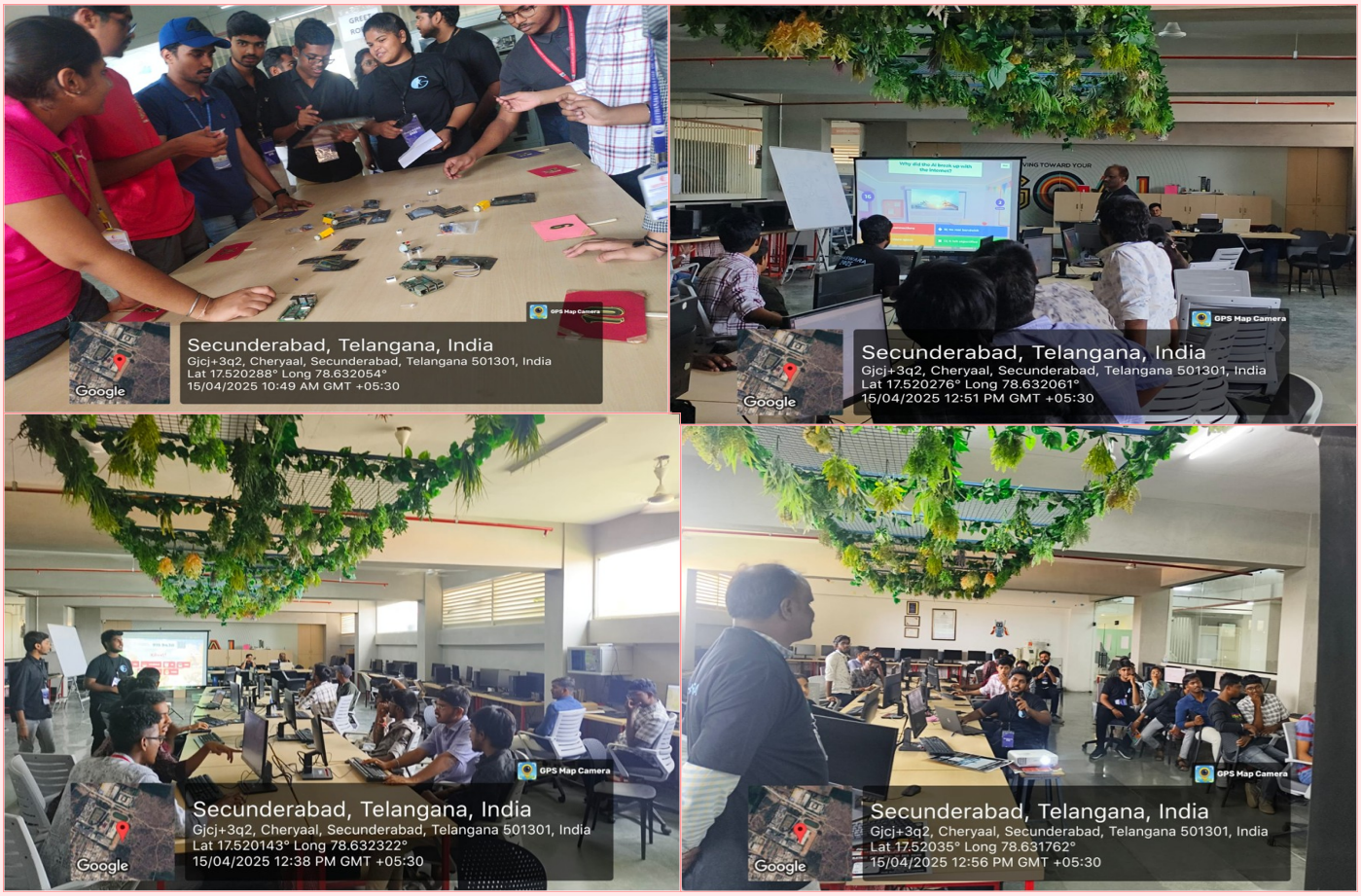
The Robotics Club of Geethanjali College of Engineering and Technology organized two dynamic and engaging events titled **"RoboRealm"** and **"Robophoria"** as part of the national-level technical and management fest BHASWARA 2K25, held on 15th and 16th April 2025. Together, these events attracted a total participation of 71 students, fostering a competitive and educational environment. The events were coordinated by **Mr. G. Praveen Kumar**, Assistant Professor, Department of Computer Science and Engineering.

RoboRealm:

This event challenged students to apply their knowledge of **IoT components**, **Arduino programming**, and **circuit design**. Participants were given a specific circuit task which they had to simulate accurately using **Tinkercad**, accompanied by the correct Arduino code. The activity emphasized precision, logic application, and hardware-software integration.

Robophoria:

Robophoria focused on creative problem-solving and robotics based tasks. Participants competed in challenges that tested their understanding of robotics concepts, real-time control systems, and their ability to implement effective automation strategies. At the conclusion of the events, cash prizes were awarded to the winners.



RoboRealm & Robophoria Event

CYBER SECURITY CLUB ACTIVITIES

- **Chakravyuh 2.0,** a thrilling Cyber Security competition, was successfully conducted at Geethanjali College of Engineering and Technology, organized by the **Cyber Security Club of GCET in association with IEEE GCET SB and IEEE Computer Society**. The event took place over three days, from March 19 to March 21, 2025. The event featured a two-day bootcamp followed by an intense **"Capture The Flag (CTF) hackathon",** providing participants with hands-on training and real-time cyber security challenges. A total of 76 students (CSE-31, CSE(DS)-7, CSE(CS)-24, CSE (AIML)-8, ECE-2, other college students (04)) were participated in the event.
- The resource persons for the bootcamp were **Mr. Krishna,** Security Analyst, Supraja Technologies, **Mr. Prem**, Security Analyst, Supraja Technologies, **Ms. Akshaya**, Mentor, Supraja Technologies, **Ms. Mithuna**, Mentor, Supraja Technologies, Vijayawada.
- The Coordinators for the event were Dr.NehaNandal, Associate Professor, CSE Dept., and Ms.B.Mamatha, Assistant Professor, CSE Dept.
- **Chakravyuh 2.0** event was a resounding success, providing students with a comprehensive learning experience in cybersecurity. The bootcamp sessions, led by industry experts, helped participants gain valuable insights into the field, while the final hackathon challenge tested their problem-solving skills and technical expertise. The event also paved the way for career opportunities, with numerous participants securing internship offers. At the conclusion of Chakravyuh 2.0, a total of 49 students received internship offers from Supraja Technologies.

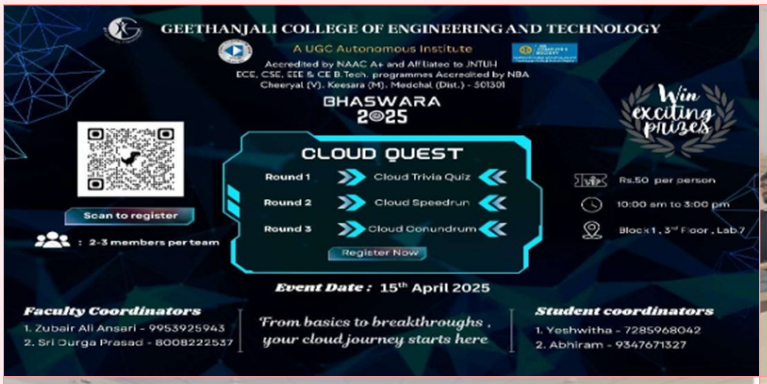
Chakravyuh 2.0

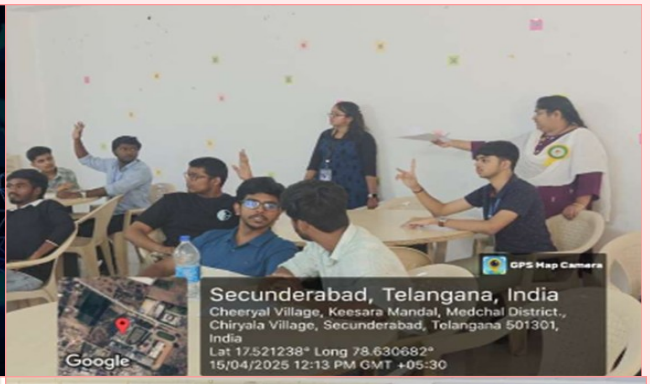
Professional Society Activities (IEEE)

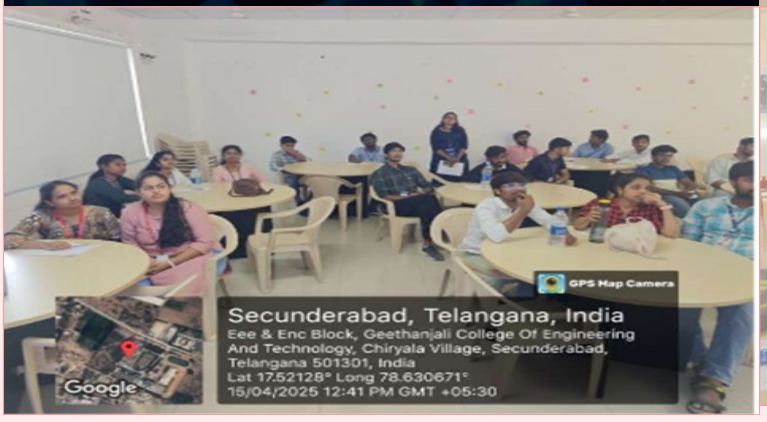
S.No.	Event Name	IEEE Society	Date of Event	Number of Participants	Faculty Coordinator	Resource person
1	CTF: Capture the Flag	IEEE - CS	21-03-2025	76 (CSE:31)	Dr. Neha Nandal	**Mr. Krishna,** Security Analyst, Supraja Technologies. **Mr. Prem,** Security Analyst, Supraja Technologies
2	Cloud Quest	IEEE-CS + CSI	15-04-2025	15	S.Durga Prasad, Zubair Ali	___
3	Cipher Chase	IEEE-CS + CSI	15-04-2025	22	K.Ashwini A.Vijaya	___

Event 1: Cloud Quest was an engaging and interactive event designed to test participants' knowledge of cloud computing fundamentals through a series of questions, puzzles, and challenges. The event aimed to enhance learning in a fun and competitive environment.

Event 2: Cipher Chase was an exciting tech-themed treasure hunt, organized by the IEEE Society of Geethanjali College of Engineering and Technology, designed to test participants' skills in logic, coding, and problem-solving. The event included three intense rounds of puzzles, debugging challenges, and a final treasure hunt.







BHASWARA 2K25

- 18th National Level Technical and Management Fest **BHASWARA 2K25** was held on 15th and 16th April 2025, organized by School of Computer Science and Informatics department. The overall coordinator for BHASWARA 2K25 is Dr.V.Madhusudan Rao, Professor & Dean, SCS&I, the convener is Dr. A.SriLakshmi, Professor & HoD-CSE, and Co-Convener is Dr.G.Bindu Madhavi, Associate Professor & HoD-CSE(AIML).
- The Overall faculty coordinators for BHASWARA 2K25 were Dr.NehaNandal, Associate Professor, CSE Dept., and Mr. K. Naresh Babu, Senior Assistant Professor, CSE(AIML) Dept.
- The **Chief Guest** for the BHASWARA 2K25 was **Mr. Sravan VMN Medapati,** Director, DCX L&D Academy, Capgemini, Hyderabad.

Summary of CSE Dept. Events Participants

Name of the Event	Number of Teams	Number of Students Participated
PAPER PRESENTATION	23	41
Cipher-Chase (Technical)	9	22
Byte-Battle (Technical)	8	17
Cloud Quest (Technical)	7	15
The Final Move (Non- Technical)	25	74
Haunt Hustlers (Non- Technical)	48	135

BHASWARA 2K25 Winner List:

Event Name: Paper Presentation

S.No.	Student Name	Roll Number	Branch	Year	Prize Won	College
1	EjumallaSaikiran	22R15A0514	CSE	4th	I	GCET
2	GopidiManasa	22R15A0515	CSE	4th	I	GCET
3	Satyam Das	21R11A05E5	CSE	4th	II	GCET
4	CheboluSricharan	21R11A05B7	CSE	4th	II	GCET
5	G.SrinivasKoushik	21R11A05C3	CSE	4th	III	GCET

Event Name: Byte Battle

S.No.	Student Name	Roll Number	Branch	Year	Prize Won	College
1	Ch.Lokeshwar Raj	23R11A6210	CSE(CS-A)	II	I	GCET
2	B.Sai Varun Gupta	23R11A6208	CSE(CS-A)	II	I	GCET
3	Gautham	21R11A05J0	CSE	IV	II	GCET
4	Anuroop	21R11A05J7	CSE	IV	II	GCET

BHASWARA 2K25

BHASWARA 2K25 Winner List:

Event Name: Cloud Quest

S.No.	Student Name	Roll Number	Branch	Year	Prize Won	College
1	Bijjula Maruthi Tanuj	22567T3008	CSE-DS	III	I	KU College of Engineering & Technology
2	Tingilkar Sai Naveen	228R1A05J7	CSE	III	II	CMR Engineering College

Event Name: Cipher Chase

S.No.	Student Name	Roll Number	Branch	Year	Prize Won	College
1	Manasa	23R11A62J9	CSE-AIML	II	I	GCET
2	A. Anji	23R11A66J5	CSE-AIML	II	I	GCET
3	M. Hruthik Sai	23R11A05C4	CSE	II	II	GCET
4	B. Karthik Naidu	23R11A0597	CSE	II	II	GCET

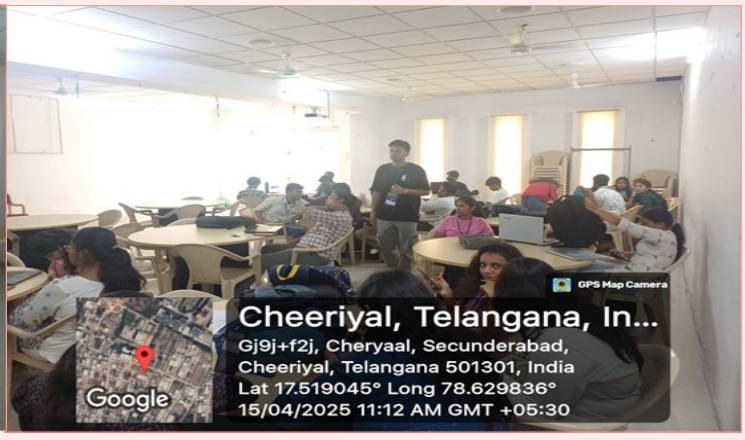
Event Name: The Final Move

S.No.	Student Name	Roll Number	Branch	Year	Prize Won	College
1	M. Pavan	24R11A0586	CSE	I	I	GCET
2	G. Vigneshwari	24R11A66N4	CSE-AIML	I	II	GCET

Event Name: Haunt Hustlers

S.No.	Student Name	Roll Number	Branch	Year	Prize Won	College
1	B. Tanishq Anand	22R11A05P7	CSE	III	I	GCET
2	N. Sai Kiran	22R11A0531	CSE	III	I	GCET
3	Harsh Jha	24R11A0572	CSE	I	II	GCET
4	Riddhi Rashi	23R11A0591	CSE	II	II	GCET

Bhaswara 2K25 Event photos:



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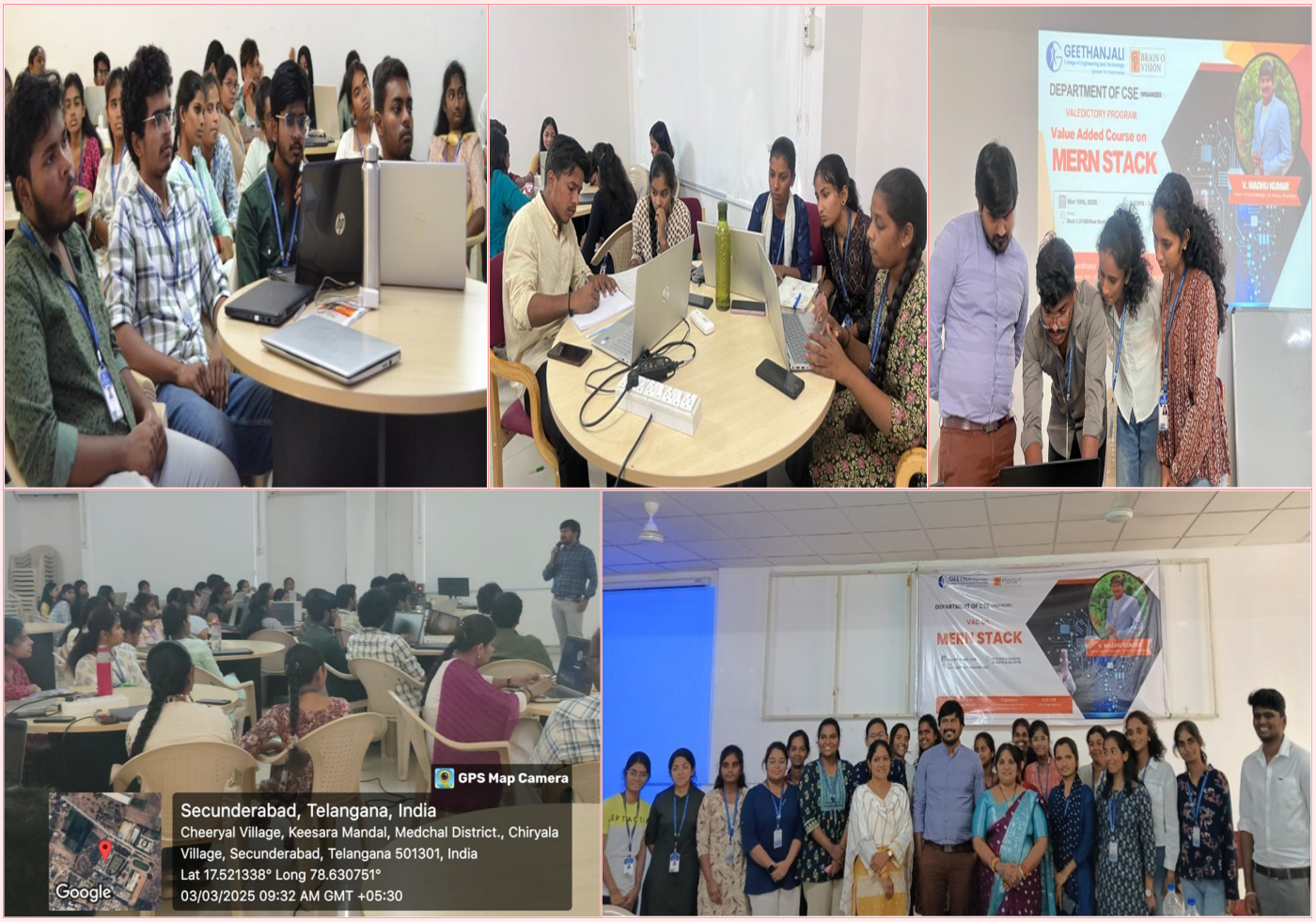
BHASWARA 2K25

Value Added Course conducted for Students

- A **Value Added Course** (VAC) on **"MERN Stack"** was held from 3rd March to 10th March 2025, organized by the Department of Computer Science and Engineering at Geethanjali College of Engineering and Technology.
- The sessions were led by **Mr. V. Madhu Kumar,** Senior Technical Head and Developer at Brain-O-Vision Solutions India Pvt. Ltd., Hyderabad. He brought valuable industry insights and deep technical expertise to the program.
- A total of **64 students** actively participated in the course, engaging in hands-on training and project -based learning. The course was coordinated by **Dr. S. Radha**, Associate Professor, along with **Mr. S. Ramanjaneyulu** and **Ms. T. Jyostna**, Assistant Professor in the CSE Department.
- The primary **objective** of the course was to **bridge the gap between academic knowledge and industry requirements,** enabling students to build full-stack web applications with real-time functionality and modern frameworks. The course was designed to equip students with practical skills in modern web development using **MongoDB, Express.js, React.js, and Node.js (MERN)** – a powerful technology stack widely used in the industry.



Value Added Course on **"MERN Stack"**

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Student Development Program (SDP) conducted for Students

- A **Student Development Program (SDP)** on **"IoT Application Development"** was held from **19th February to 28th February 2025,** organized by the **Department of Computer Science and Engineering** at **Geethanjali College of Engineering and Technology.** The program was coordinated by Dr. S.Radha, Associate Professor, CSE Department and Ms.A.Abhilasha, Assistant Professor, CSE Dept.
- The sessions were conducted by **Mr. Madhu Parvathaneni**, Solutions Architect and CEO of **Make Skilled**, Hyderabad, who served as the resource person for the program. A total of **66 third-year CSE students** actively participated in the SDP.
- Over the course of the program, students were exposed to various concepts and hands-on sessions related to the Internet of Things. By the end of the program, participants successfully designed and developed their own **IoT-based prototypes**, applying the concepts and skills acquired during the sessions. The program concluded with a **Project Expo**, where students effectively demonstrated their prototypes, highlighting the practical implementation of their learning.

PROJECT EXPO WINNERS LIST

Team No.	Roll Number	Student Name	Project Title	Prize	Cash Prize Won (Rs.)
1	22R11A0516	Kaligithi Rohith	Jarvis Smart Home Automation System	I	2500
	22R11A0528	Mudigonda Chaitanya Aradhya			
	22R11A0536	Samala Saiteja			
2	22R11A05H5	Ranga Indu	Smart Gas Stove	II	1500
	22R11A05J2	Vadlakunti Sindu			
3	22R11A05P6	Bairi Ramya	Automatic Pet Feeder	III	1500
	22R11A05P9	Batna Doritha Kanchana			
	22R11A05R7	Nemali Madhurima			

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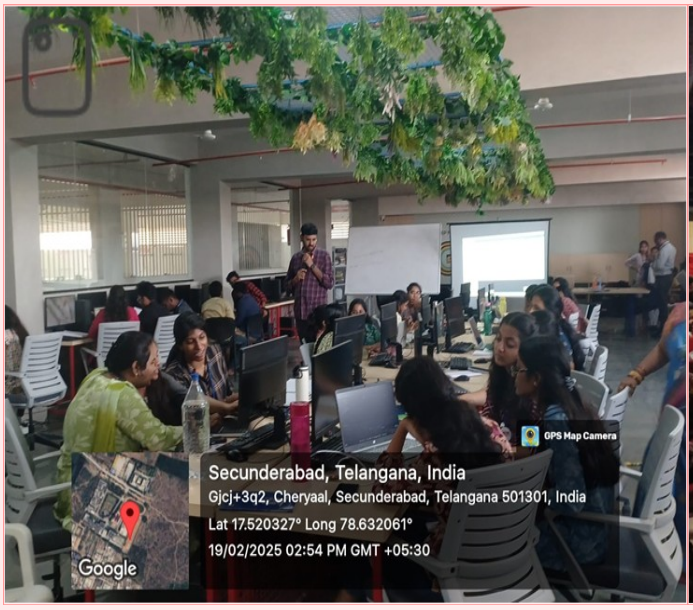
Student Development Program on “IoT Application Development"

Guest Lectures/Workshops conducted for Students

S.No.	Title of Guest Lecture/ Industry Expert Talk	Date	Resource Person	Number of Students attended / Target Audience
1.	Guest Lecture on**"Edge AI in IoT: Smarter Devices for a Smarter World"**	19-02-2025	**Mr. MadhuParvathaneni,** Solutions Architect& CEO, Make Skilled Innovations Park, Hyderabad.	III year CSE Students (66)
2.	Guest Lecture on "**Web Technologies – A Gate-way to Building the Future"**	11-04-2025	**Mr. Naveen Samala,** Global Portfolio Manage-ment Leader (Supply Chain Excellence), Diebold Nixdorf India Pvt. Ltd, Hyderabad	III year CSE Students (116)
3.	Guest Lecture on **"Block Chain Technolo-gies – Hyper ledger Composer and Block chain Applications"**	25-04-2025	**Mr. Siv Ram ShastriJonnalagadda,** Co-Founder of Hyderabad DAO, Hyderabad	III year CSE Students (62)
4.	Industry Expert Talk on "**Introduction to Large Language Models**"	15-02- 2025	**Dr. AnirudhKasturi,** Founding Engineer, Al-loan.ai	III year CSE Students (80)
5.	Industry Expert Talk on "**IT World :Insights for Fresh Graduates**"	24-02- 2025	**Mr. Raghavendra Prasad Pathipati,** Principal Consultant, Infosys	II Year, III year CSE Students (75)

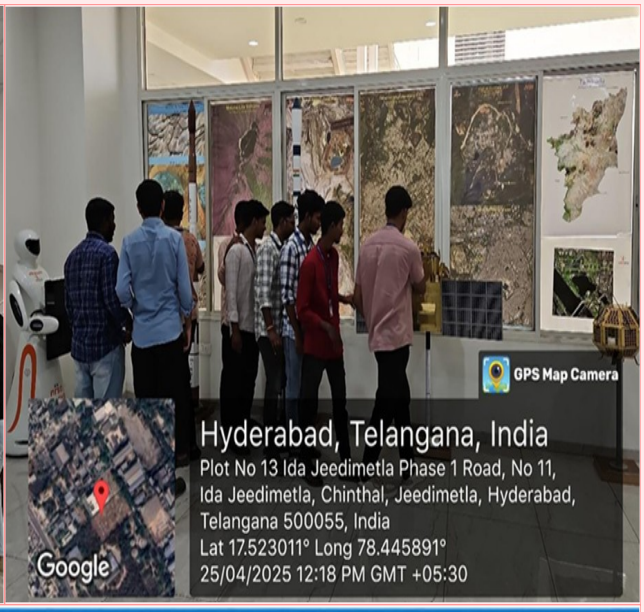


Guest Lecture on **"Edge AI in IoT"**

Guest Lecture on "**Web Technologies**"

Industrial Visit

- An **Industrial Visit** to the **National Remote Sensing Centre (NRSC), Hyderabad** was held on 25th April 2025, organized by the Department of Computer Science and Engineering at Geethanjali College of Engineering and Technology. A total of 68 second year CSE students and 4 faculty members participated in the visit. The visit provided valuable insights into satellite data acquisition, geospatial technologies, and remote sensing applications in various domains. The Coordinator for the Industrial visit was Dr.S.Viswanath Reddy, Associate Professor, CSE Dept.



Industrial Visit to the **National Remote Sensing Centre, Hyderabad**

Industry Collaborations / MoU

- **Geethanjali College of Engineering and Technology, Hyderabad, signed an MoU with E&ICT Academy, IIT Roorkee** on 17th May 2025. This partnership recognizes GCET as an official E&ICT Academy Hub to conduct advanced training and skill development programs. The initiative is supported by the Ministry of Electronics and Information Technology (MeitY), Government of India. It aims to enhance employability and technical expertise in the fields of Electronics and ICT. This collaboration will offer students and faculty access to national level resources, certifications, and expert training. The MoU will remain in effect for a period of four years.
- **A Memorandum of Understanding (MoU)** was signed between **Kalinga University,** Raipur, and **Geethanjali College of Engineering and Technology,** Hyderabad on 30th April, 2025.
- **Centre of Excellence** for **AI, Robotics & Drones** was established in collaboration with **BDS Education** on 30th June, 2025.

Inauguration of Centre of Excellence for AI, Robotics & Drones

Faculty Development Program

- A One Week **Faculty Development Programme (FDP)** on **"AIpreneurship: Building the Future with Deep Learning Innovations"** held from 14th to 19th June, 2025 through Hybrid mode (Online & Offline) in **joint collaboration with the E&ICT Academy, IIT Roorkee,** organized by the **Department of Computer Science and Engineering, Geethanjali College of Engineering and Technology.** The programme aimed to provide faculty members with deep insights into cutting-edge Deep Learning technologies and their role in fostering innovation and entrepreneurship. The conveners for the FDP were Dr.E.Ravindra, Professor and Head of the Department of CSE, and Dr. V. Madhusudan Rao, Professor and Dean, SCS&I.
- The principal investigator for the FDP was **Prof. Sanjeev Manhas,** Department of ECE, IIT Roorkee and the course coordinator for the FDP was **Dr. Puja S.Prasad,** Professor, GCET.
- A total of 61 faculty participants attended the programme and benefitted from the expert sessions on AI-driven innovation and practical applications of Deep Learning in real-world scenarios.
- The programme featured expert sessions by distinguished resource persons including **Dr. Mohammad Farukh Hashmi**, NIT Warangal, **Dr. AvatharamGanivada,** School of Computer and Information Sciences, University of Hyderabad, **Dr. Anand Kumar**, NITK Surathkal, **Dr. Abhijeet Das**, BITS Pilani, Hyderabad Campus, **Dr. Kiran Kandula**, Data Scientist, **Prof. C. Hota,** Senior Professor, BITS Pilani, Hyderabad, **Dr. M. Madhavan**, IIIT Kottayam, **Dr. Rajesh Kumar Srivastava,** Bennett University, and **Dr. SreenivasuluMadichetty**, Data Science Manager, Hyderabad.

Faculty Development Program

FDP on **"AIpreneurship: Building the Future with Deep Learning Innovations"**

- A five day **Faculty Development Programme** on **"Next-Gen STEM Teaching with Python and Intelligent Machines"** was conducted from 30th June to 4th July 2025, in joint collaboration with the IEEE Student Branch of Kalinga University and BDS Education. The resource person for the FDP was **Dr. B. Vijaya Lakshmi,** Director of IQAC, Kalinga University. A total of 35 faculty members actively participated in the programme. The coordinator for the FDP was Mr.G.Praveen Kumar, Senior Assistant Professor, and the coordinator was Dr. Puja S.Prasad, Professor, GCET.

FDP on "Next-Gen STEM Teaching with Python and Intelligent Machines"

FDP on "Next-Gen STEM Teaching with Python and Intelligent Machines"

CSE Student Placements of 2021-2025 Batch as on June 2025

S.No.	Roll Number	Name of the Candidate	Name of the Company	Salary Package
1	21R11A05Q0	PALLAVI KUMARI	CATALOG	25 LPA
2	21R11A05D0	MAMILLA RITHIKA	ZETA TECH LTD	16 LPA
3	21R11A05D2	MANDADI HAR-SHITHA REDDY	SERVICENOW SOFT-WARE	11 LPA
4	21R11A0510	BURRA KEERTHI	RINEX TECHNOLOGIES	10 LPA
5	21R11A0527	L DHANYA DURGA SIVA PRIYA	RINEX TECHNOLOGIES	10 LPA
6	21R11A0580	KATUKURI VAM-SHIDHAR REDDY	RINEX TECHNOLOGIES	10 LPA
7	21R11A05K1	RATHOD POOJITHA	RINEX TECHNOLOGIES	10 LPA
8	21R11A0514	GADDAM THARUN	EDVEDHA EDUTECH	8 LPA
9	21R11A0568	G ANSHUMAN	EDVEDHA EDUTECH	8 LPA
10	21R11A05A6	ABHIRAM VENKATA DAITA	EDVEDHA EDUTECH	8 LPA
11	21R11A05F6	GOPALAKRISHNA BANDLA	EDVEDHA EDUTECH	8 LPA
12	21R11A05M0	BADUGU JESSY	EDVEDHA EDUTECH	8 LPA
13	22R15A0518	AAKI DEVISRI	EDVEDHA EDUTECH	8 LPA
14	22R15A0522	THUMMA MAHESH	EDVEDHA EDUTECH	8 LPA
15	22R15A0503	JELANELA KRISHNA VENI	ADVI GROUP	7.5 LPA
16	22R15A0515	GOPIDI MANASA	ADVI GROUP	7.5 LPA
17	21R11A0534	MD KHALID HASAN ANSARI	CODE YOUNG	7.36 LPA
18	21R11A0504	ATYAM HARSHITH SAI	ARCADIS IBI	7 LPA
19	21R11A0501	A POOJA GOUD	INSPIRE LEAP	6 LPA
20	21R11A0559	AVVARU GURU JAYANTH	KRUTANIC SOLUTIONS	6 LPA
21	21R11A0592	PARANDHA CHAN-DANA	KRUTANIC SOLUTIONS	6 LPA
22	21R11A05B1	BERELLI PREETHAM RAO	KRUTANIC SOLUTIONS	6 LPA
23	22R15A0507	GODA POOJITHA	KRUTANIC SOLUTIONS	6 LPA
24	22R15A0521	M VIGNESH	INSPIRE LEAP	6 LPA
25	20R11A0540	SRINIDHI P	KI-TECH PVT LTD	5.2 LPA

CSE Student Placements of 2021-2025 Batch as on June 2025

S.No.	Roll Number	Name of the Candidate	Name of the Company	Salary Package
26	21R11A0505	AYYANAGARI SAI CHARAN REDDY	SKILL INTERN	5.2 LPA
27	21R11A0508	BODDU TEJASRI	KI-TECH PVT LTD	5.2 LPA
28	21R11A0509	BONAGIRI BHARGAVI	KI-TECH PVT LTD	5.2 LPA
29	21R11A0513	GADDA ZEENITH	KI-TECH PVT LTD	5.2 LPA
30	21R11A0528	M SAHITHI	KI-TECH PVT LTD	5.2 LPA
31	21R11A0536	MOHAMMED RAFI	KI-TECH PVT LTD	5.2 LPA
32	21R11A0540	PARAMATA DHEERAJ	KI-TECH PVT LTD	5.2 LPA
33	21R11A0541	PULI REENA	KI-TECH PVT LTD	5.2 LPA
34	21R11A0542	RAGIRI SAI TEJA	KI-TECH PVT LTD	5.2 LPA
35	21R11A0546	S PRANEETH KUMAR	KI-TECH PVT LTD	5.2 LPA
36	21R11A0572	HANUMANDLA YESHWANTH REDDY	KI-TECH PVT LTD	5.2 LPA
37	21R11A0579	KARNATI MYSAN-THOSH	KI-TECH PVT LTD	5.2 LPA
38	21R11A0591	PAILA ABHINAYA	KI-TECH PVT LTD	5.2 LPA
39	21R11A05C9	MAMIDALA CHA-RAN	KI-TECH PVT LTD	5.2 LPA
40	21R11A05E4	SAKSHI CHANDE-SURYE	KI-TECH PVT LTD	5.2 LPA
41	21R11A05G6	GUJJULA TEJASRI	KI-TECH PVT LTD	5.2 LPA
42	21R11A05J4	NARRA VENKA-TANATH PRASAD	KI-TECH PVT LTD	5.2 LPA
43	21R11A05J5	NEELA PAVAN KALYAN	KI-TECH PVT LTD	5.2 LPA
44	22R15A0504	KONDRA POO-JITHA	KI-TECH PVT LTD	5.2 LPA
45	22R15A0505	P MADHU PRIYA	KI-TECH PVT LTD	5.2 LPA
46	22R15A0512	MADA SANKALPA	KI-TECH PVT LTD	5.2 LPA
47	22R15A0520	KOTAGIRI RAMYA	KI-TECH PVT LTD	5.2 LPA

CSE Student Placements of 2021-2025 Batch as on June 2025

S.No.	Roll Number	Name of the Candidate	Name of the Company	Salary Package
48	21R11A0552	Y.VENKATA SAI SARATH CHANDRA	LAUNCHED	5 LPA
49	21R11A05J6	ODDEPALLY PUJITHA	LAUNCHED	5 LPA
50	21R11A0533	MANGIPUDI PAVAN KALYAN	ARTECH INFOSYS-TEMS	4.68 LPA
51	22R15A0525	K REVATHI	MUGDHA ART STUDIO	4.20 LPA
52	21R11A0506	B NAVEEN	COGNIZANT GENC	4.01 LPA
53	21R11A0526	KUCHULAKANTI SHRUTHI	COGNIZANT GENC	4.01 LPA
54	21R11A0537	PABBA ROHITH	COGNIZANT GENC	4.01 LPA
55	21R11A0544	REGATI VARSHA	COGNIZANT GENC	4.01 LPA
56	21R11A0562	BORAPUREDDI UMA MAHESH	COGNIZANT GENC	4.01 LPA
57	21R11A0589	NAVEEN RAMPA	COGNIZANT GENC	4.01 LPA
58	21R11A0599	SURYA VAMSI CHA-DARAM	COGNIZANT GENC	4.01 LPA
59	21R11A05A7	ADULLA SHRIYA	COGNIZANT GENC	4.01 LPA
60	21R11A05C3	G SRINIVAS KOUSHIK	COGNIZANT GENC	4.01 LPA
61	21R11A05C8	KOSURU BHARATH KUMAR	COGNIZANT GENC	4.01 LPA
62	21R11A05D1	MANDA ANJANI	COGNIZANT GENC	4.01 LPA
63	21R11A05D4	MELLACHERVU VARSHITH	COGNIZANT GENC	4.01 LPA
64	21R11A05H3	SHANIGARAPU LAKSHANYA	COGNIZANT GENC	4.01 LPA
65	21R11A05M2	BOREDDY SANDEEP REDDY	COGNIZANT GENC	4.01 LPA
66	21R11A0503	ANNAMRAJU VENKATA SREE-LASYA	AURUS TECH PVT. LTD.	4 LPA
67	21R11A0516	GOLKONDA SAI VA-RUN YADAV	TEACHNOOK EDUTECH	4 LPA
68	21R11A0521	JANMANCHI DEEKSHITHA	INTERNZ VALLEY	4 LPA
69	21R11A0524	KESIREDDY PRAVALIKA	INTRAINZ INNOVATION	4 LPA

CSE Student Placements of 2021-2025 Batch as on June 2025

S.No.	Roll Number	Name of the Candidate	Name of the Company	Salary Package
70	21R11A0535	M VENKATA SAI SHASHANK	INTERNZ VALLEY	4 LPA
71	21R11A0539	PAPPULA BENJAMIN	INTRAINZ INNOVATION	4 LPA
72	21R11A0545	RONDLA DHATHRI	CORIZO EDUTECH	4 LPA
73	21R11A0554	A PRAVEEN	INTERNZ VALLEY	4 LPA
74	21R11A0570	GATTU JAHNAVI	EDIGLOBE	4 LPA
75	21R11A0583	KUNDURU PRAVALIKA	INTRAINZ INNOVATION	4 LPA
76	21R11A0590	NISTALA LAK-SHMI SOUJANYA	INTERNZ VALLEY	4 LPA
77	21R11A0597	SHIVANOOR VIGNESH	AURUS TECH PVT. LTD	4 LPA
78	21R11A05A8	AKELLA SAI SRUJANA	INTERNZ VALLEY	4 LPA
79	21R11A05A9	ANRASA NAGA LAXMI	INTERNZ VALLEY	4 LPA
80	21R11A05B0	BADDAM VAR-SHITH REDDY	KNACK TECH	4 LPA
81	21R11A05B4	BOPPANA PRANEETHA CHOWDARY	CORIZO EDUTECH	4 LPA
82	21R11A05C1	DASARI SAI BHAVANI	TEACHNOOK EDUTECH	4 LPA
83	21R11A05C5	GNANA SWAROOP KAKUMANU	KNACK TECH	4 LPA
84	21R11A05D8	N KUSUMA	ACADEMOR	4 LPA
85	21R11A05E0	PASUPULETI MOULIKA	INTERNZ VALLEY	4 LPA
86	21R11A05E7	SINGAR TEJASVI	INTRAINZ INNOVATION	4 LPA
87	21R11A05F2	THAMMANA DIVYA MANI KU-SUMA	TEACHNOOK EDUTECH	4 LPA
88	21R11A05F4	UNDRU VARDHINI VENKATA SAI	INTRAINZ INNOVATION	4 LPA
89	21R11A05F9	BODDU KEERTHI	INTRAINZ INNOVATION	4 LPA
90	21R11A05G0	CHETTE SATH-WIKA	AURUS TECH PVT. LTD	4 LPA
91	21R11A05G1	DEVARAKONDA SWATHI	ACADEMOR	4 LPA

CSE Student Placements of 2021-2025 Batch as on June 2025

S.No.	Roll Number	Name of the Candidate	Name of the Company	Salary Package
92	21R11A05G2	D VAISHNAVI	ACADEMOR	4 LPA
93	21R11A05J3	N VAISHNAVI	CORIZO EDUTECH	4 LPA
94	21R11A05K8	TANNERU GURU LAKSHMI	ACADEMOR	4 LPA
95	21R11A05L2	VELDAL AKKILESWARI	ACMEGRADE PVT LTD	4 LPA
96	21R11A05M1	BANDARI ARJUN	INTERNZ VALLEY	4 LPA
97	21R11A05N0	GURRAM SREEHITHA	INTERNZ VALLEY	4 LPA
98	21R11A05N6	KOLIKAPONGU KIRAN KUMAR	ACADEMOR	4 LPA
99	21R11A05Q2	PASALA MARY NIHARIKA	INTERNZ VALLEY	4 LPA
100	21R11A05Q4	P HARSHA VARDHAN	KNACK TECH	4 LPA
101	21R11A05Q5	POLAGONI AJAY KUMAR	KNACK TECH	4 LPA
102	21R11A05Q8	SAMA PRAKASH REDDY	AURUS TECH PVT. LTD	4 LPA
103	21R11A05R6	V ROHAN	KNACK TECH	4 LPA
104	22R15A0502	G SWAPNIL	INTERNZ VALLEY	4 LPA
105	22R15A0508	GUDIKATI ASHOK	EDIGLOBE	4 LPA
106	22R15A0509	K SAI TEJA	KNACK TECH	4 LPA
107	22R15A0516	NADIMPALLY VAISHNAVI DEVI	INTERNZ VALLEY	4 LPA
108	21R11A0538	PAILLA SAI KUMAR REDDY	CADSYS INDIA LTD	3.43 LPA
109	21R11A0550	SUNKANNAGARI VENKATESH	CADSYS INDIA LTD	3.43 LPA
110	21R11A0519	GUNDA HARSHIT	AHEX TECHNOLOGIES	2.90 LPA
111	21R11A0586	MOHAMMAD AKBAR ALI	AHEX TECHNOLOGIES	2.90 LPA
112	21R11A05B8	CHERVIRALA SHIVA KUMAR	AHEX TECHNOLOGIES	2.90 LPA
113	21R11A0582	KUDUMULA HE-MANTH REDDY	ARCADIS IBI	2.40 LPA
114	21R11A05F0	SURAJ KUMAR PANDA	REAL PAGE INDIA	1.80 LPA
115	21R11A05N1	KADIRE NANDA KISHORE REDDI	QTRAMS IT SOLUTIONS	1.80 LPA

Alumni Interactions

S.No.	Title of the Seminar	Date Held	Resource Person	No. of students attended	Faculty Coordinator
1	Seminar on **"Trends in Software Technology"**	24-01-2025	**Mr.Kunche Ravi Kumar,** MyCaptain, HR, [2019-2023 batch]	60 CSE students	Ms. E.Vijaya Assistant Professor, CSE Dept., GCET
2	Seminar on **"Beyond Graduation"**	02-04-2025	**Mr.Harshith Varma,** Application System Developer, Shure Inc. [2019-2023 batch]	40 CSE students	Ms. E.Vijaya Assistant Professor, CSE Dept., GCET

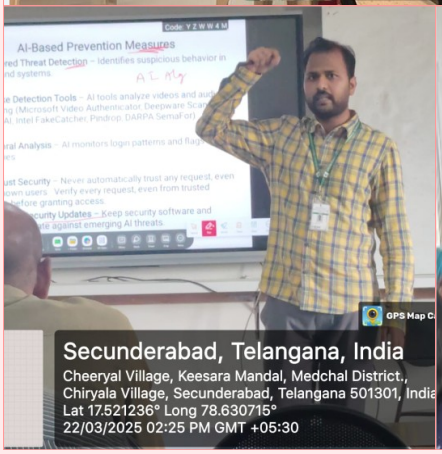
Alumni Interaction on "Beyond Graduation" by Mr. HarshithVarma (19R11A05F5)

Academic Toppers

Roll Number	Student Name	CGPA	Rank	Year
20R11A05E6	KASTURI ANUSHA	9.23	1	IV Year
20R11A05A5	RAMINENI BHAVYA	9.20	2	IV Year
20R11A0590	KOLETI PAVANI PRIYA	9.15	3	IV Year
20R11A0511	BONGONI VAISHNAVI	9.13	4	IV Year
20R11A0541	PENUMANTRA AMRUTHA SAI SRI	9.13	5	IV Year
21R11A0569	GALIPALLY SANDHYA RANI	8.88	1	III Year
21R11A05D2	MANDADI HARSHITHA REDDY	8.78	2	III Year
21R11A05D0	MAMILLA RITHIKA	8.73	3	III Year
21R11A05M2	BOREDDY SANDEEP REDDY	8.70	4	III Year
21R11A0562	BORAPUREDDI UMA MAHESH	8.63	5	III Year
22R11A05B4	GURUVELLI RAMYA SREE	9.49	1	II year
22R11A0598	A SRAVYA SREE	9.48	2	II year
22R11A05Y7	V SAI SHARANYA	9.46	3	II year
22R11A0571	MADISHETTI RACHANA	9.25	4	II year
22R11A0596	A PALLAVI NAGALAKSHMI	9.20	5	II year
22R11A0579	RAVULA SAI MONISHA	9.16	6	II year
22R11A05G8	NALAMACHU SRINIHITHA	9.12	7	II year
23R11A0565	JELLA RUTHPRIYADARSHINI	9.69	1	I year
23R11A05L0	K GUNJANA	9.68	2	I year
23R11A0573	MADIRAJU LAXMI SHRADHA	9.58	3	I year
23R11A0567	KANCHARLA VAISHNAVI REDDY	9.56	4	I year
23R11A05K4	DUDDEKUNTA APARNA REDDY	9.53	5	I year
23R11A0532	POLA MANOGNA	9.51	6	I year
23R11A05Q6	KOMMAJOSYULA SHREEYA	9.43	7	I year

Faculty Research Seminars conducted during January — June 2025

S.No.	Name of the Faculty	Research Topic	Date Held
1	Dr. S. Vishwanath Reddy	Algorithms for Obnoxious Facility Dispersion in the Plane	04-01-2025
2	Mrs. G.Niveditha	Explainable AI: Bridging the gap between Models and Insights	18-01-2025
3	Mr. S. Ramanjaneyulu	Feature Based Opinion Mining	25-01-2025
4	Mrs. P. Ushashree	Design Thinking	01-02-2025
5	Mr. E. Mahender	Federated Learning: A Case Study on Managing Heterogeneity in Medical Data	08-02-2025
6	Mr. P. Krishna Rao	Reinforcement Learning based optimal task scheduling in cloud environments	01-03-2025
7	Mr. Y. Siva	Anomaly Detection in Social Engineering Attacks	22-03-2025
8	Mrs. V. Sravanthi	Breast Cancer Detection in IoT environments	19-04-2025
9	Mrs. T. Jyotsna	A Discussion on EduChain: CIA - complaint Blockchain for Intelligent Cyber Defense of Micro services in Education Industry	26-04-2025



Faculty Research Seminars

Faculty Publications during January – June 2025

S.No.	Faculty Name	Title of the Paper	Journal Name/ Conference	ISSN, Volume No., Issue No., Page No.	Indexing	Month & Year of Publication
1.	Dr. R.V Sudhakar	An Enhanced Light-weight Secure Authentication and Privacy- Preserving Approach for VANETs	International Journal Of Sensors, Wireless Communica-tions And Control	ISSN (Print): 2210-3279, ISSN (Online): 2210-3287, Volume 15, Issue 1	Scopus	Jan, 2025
2.	Dr. Radha Seelaboy-ina	An Intelligent Multi-Class Brain Tumor Classification System	IJSDR	ISSN: 2455-2631, Volume 10, Issue 1	Non-UGC	Jan, 2025
3.	Ms.E. Vijaya	Generative Adversar-ial Networks For Cy-ber Threat Simulation And Defence Strate-gies	Journal Of Theoretical And Applied Information Technology	ISSN: 1992-8645 Volume 103, Issue 4, Page No:1388-1400	Scopus	Feb, 2025
4.	Mr. P. Chandra Sekhar Reddy, Dr. R.V Sudhakar	Attention-Enhanced Deep Learning Frame-work For Accurate Image Forgery Detec-tion And Localization	Journal Of Theoretical And Applied Information Technology	ISSN: 1992-8645, E-ISSN: 1817-3195, Volume 103, Issue No.4, Page No:1466-1486	Scopus	Feb, 2025
5.	Dr.A.Hari Prasad Reddy	XOR-Based Security and Affine Transfor-mation for Image Encryption	Journal Of Computer Science	ISSN NO: 1549-3636, Volume 18, Issue 2	Scopus	Feb, 2025
6.	Dr. S. Puja Prasad	A discriminative model for scale, trans-lation and rotation in-variant face recogni-tion	International Journal Of Biometrics	ISSN NO: 1755-8301 / 1755-831X, Volume 17, Issue No. 4, Page no. 331-348	ESCI	Mar, 2025
7.	Dr.A.Sree Lakshmi	Privacy Protection in Learning Management Systems' Mobile Technology-Based Learning Analytics	International Journal of Interactive Mobile Tech-nologies	eISSN: 1865-7923, Volume 19, Issue No. 6, Page No:197-208	Scopus (Q3)	Mar, 2025

Faculty Publications during January – June 2025

S.No.	Faculty Name	Title of the Paper	Journal Name/ Conference	ISSN, Volume No., Issue No., Page No.	Indexing	Month & Year of Publication
8.	Ms. G. Udaya Sree	AI Driven Hand-written Assign-ment Analysis and Evaluation	International Journal for Re-search in Applied Science & Engi-neering Technol-ogy (IJRASET)	ISSN: 2321-9653, Volume 13, Issue 4, Page No:6999-7002	Non-UGC	April, 2025
9.	Ms. G.Udaya Sree	Restaurant Rating Prediction Using Food Delivery Applications	IJRASET	ISSN: 2321-9653, Volume 13, Issue 4, Page No: 6999-7002	Non-UGC	April, 2025
10.	Mr.P.Krishna Rao	AI Personal Study Buddy: A Web-Based Adaptive Scheduling and Summarization Assistant for Aca-demic Support	International Journal of Scien-tific Develop-ment and Re-search (IJSDR)	ISSN:2455-2631 , Vol-ume 10, Issue 4, Page No:158-161	Non-UGC	April, 2025
11.	Mr.P. Krishna Rao	Gitagpt- Ultimate Guide To Time-less Wisdom	International Journal of Re-search and Ana-lytical Reviews (IJRAR)	E-ISSN: 2348-1269, Volume 12, Issue No. 2, Page No:971-976	Non-UGC	May, 2025
12.	Ms. M.Vishwa Shanthi	Text-To-Video Generator	International Sci-entific Journal of Engineering and Management (ISJEM)	ISSN: 2583-6129, Vol-ume: 04, Issue No. 05, Page No.:1-6	Non-UGC	May, 2025
13.	Ms. M. Vishwa Shanthi	Invest IQ	International Sci-entific Journal of Engineering and Management	ISSN: 2583-6129, Volume 04, Issue No 05,	Non-UGC	May, 2025
14.	Ms.G.Santhoshi	Generative AI Based Teaching Assistant	International Journal Of Inno-vative Research In Technology	ISSN: 2349-6002, Vol-ume 11, Issue 12, Page No.: 2958-2963	Non-UGC	May, 2025

Faculty Publications during January – June 2025

S.No.	Faculty Name	Title of the Paper	Journal Name/ Name of the Conference	ISSN/ISBN, Volume No., Issue No., Page No.	Index-ing	Month & Year of Publica-tion
15.	Ms. G.Santhoshi	Cerebral Smart Home : Bci Based Smart Home Automa-tion Using ECG Signals	International Re-search Journal	ISSN 2349-9249 , Volume 12, Issue 5.	Non-UGC	May, 2025
16.	Ms.K.DurgaK alyani	AI-Powered Synthetic Media Detection	International Jour-nal of Scientific Development and Research	ISSN: 2455-2631, Volume 10 , Issue 5, Page Number: c32-c36	Non-UGC	May, 2025
17.	Ms.V.Sravant hi	Intelligent Malware Detection and Behav-ioral Analysis Through Machine Learning	International Jour-nal of Scientific Research in Engi-neering and Man-agement	ISSN: 2582-3930, Vol-ume: 09, Issue: 06	Non-UGC	June, 2025
18.	Ms.K. Ash-wini	Blocktalk Conversa-tional Payments Re-fined	International Scien-tific Journal of En-gineering and Man-agement (ISJEM)	ISSN: 2583-6129, Vol-ume: 04, Is-sue: 05, Page No.:1-6	Non-UGC	June, 2025
19.	Ms.K. Ash-wini	Blockchain-Powered Product Authentica-tion and Counterfeit Detection Using QR Code Technology	International Jour-nal of Scientific Research in Engi-neering and Man-agement (IJSREM)	ISSN: 2582-3930, Vol-ume: 09, Issue: 06, Page No.:1-6	Non-UGC	June, 2025
20.	Ms. P. Sobha Rani	A Deep Learning Ap-proach for Cervical Cancer Prediction and Prevention in Women's Health	4th Asian Confer-ence on Innovation in Technology (ASIANCON)	E-ISBN:979-8-3503-5421-8, ISBN:979-8-3503-5420-1, ISBN:979-8-3503-5422-5	Scopus Index (IEEE)	Jan, 2025
21.	Dr.Madhuri Agrawal, Dr. Puja S. Prasad, Dr. Neha Nandal	A Review on Outlier Detection Model in Blockchain Technology	3rd DELCON, 2024 IEEE International Conference on Advancing Tech-nology for Sustain-able Development	Electronic ISBN:979-8-3315-1859-2, Print on De-mand (PoD) ISBN:979-8-3315-1860-8	Scopus Index	Feb, 2025

Faculty Publications during January – June 2025

S.No.	Faculty Name	Title of the Paper	Journal Name/ Name of the Conference	ISBN/ISSN, Volume No., Issue No., Page No.	Index-ing	Month & Year of Publica-tion
22.	Ms.Pasnur Deeplaxmi	Resource Optimiza-tion in Cloud Environ-ment using Advanced Metaheuristic Sched-uling Algorithm	International Con-ference on Sustain-able Communica-tion Networks and Application (ICSCNA-2024)	ISBN: 979-8-3315-3001-3	Scopus Index (IEEE)	Feb, 2025
23.	Ms.Sonam Marate, Ms. G Anusha, Ms. T. Neelima	DOA: Optimizing Re-source Utilization in Cloud Environment Using Multi-Objective Meta-Heuristic Sched-uling Algorithm	2024 International Conference on Ad-vancement in Re-newable Energy and Intelligent Sys-tems (AREIS)	Electronic ISBN:979-8-3503-8723-0 Print on De-mand(PoD), ISBN:979-8-3503-8724-7	Scopus Index (IEEE)	Feb, 2025
24.	Mr. E.Mahender	Privacy-Preserving Federated Learning for Predictive Healthcare on Heterogeneous Medical Data	2nd International Conference Emerg-ing Research in Computational Sci-ences ICERCS`24	Electronic ISBN:979-8-3315-3496-7 Print on De-mand(PoD), ISBN:979-8-3503-8724-4	Scopus Index (IEEE)	Feb, 2025
25.	Ms. P.Ushashree	MindCare: Machine Learning based Per-sonalized Mental Health Monitor	2024 4th Interna-tional Conference on Sustainable Ex-pert Systems (ICSES)	Electronic ISBN:979-8-3315-4036-4 DVD, ISBN:979-8-3315-4035-7 Print on De-mand(PoD), ISBN:979-8-3315-4037-1	Scopus Index (IEEE)	March, 2025
26.	Ms. P.Ushashree	AI-Driven Health: A Web App for En-hanced Healthcare Queries and Nutrition Analysis	2024 5th Interna-tional Conference on Smart Electron-ics and Communi-cation (ICOSEC)	Electronic ISBN:979-8-3315-0440-3 DVD, ISBN:979-8-3315-0439-7 (PoD), ISBN:979-8-3315-0441-0	Scopus Index (IEEE)	March, 2025

Faculty Publications during January – June 2025

S.No.	Faculty Name	Title of the Paper	Journal Name/ Name of the Conference	ISBN/ISSN, Volume No., Issue No., Page No.	Index-ing	Month & Year of Publica-tion
27.	Dr. Puja S Prasad	Secure and privacy focused electronic health record manage-ment framework using blockchain and IPFS	2024 IEEE Interna-tional Conference on Advanced Net-works and Tele-communications Systems (ANTS)	Electronic ISBN:979-8-3503-9172-5 Print on De-mand(PoD), ISBN:979-8-3503-9173-2, Electronic ISSN: 2153-1684 Print on De-mand(PoD), ISSN: 2153-1676	Scopus Index	March, 2025
28.	Ms. M.Vishwa Shanthi	Leveraging Attention Mechanisms In Res-net101 For Enhanced Facial Emotion Rec-ognition	2025 3rd Interna-tional Conference on Advancement in Computation & Computer Tech-nologies (InCACCT)	Electronic ISBN:979-8-3315-4389-1 Print on De-mand(PoD), ISBN:979-8-3315-4390-7	Scopus Index (IEEE)	May, 2025
29.	Mr. P.Krishna Rao	Evaluating the Impact of Quantum Algo-rithms on Modern Cy-bersecurity Mechanisms	2025 National Con-ference on Furistic Technologies	ISSN: 2582-3930	Others	June,2025
30.	Dr. Kamak-shaiah Kolli	InSight-D Through the Lens of AI: A Com-prehensive Review of Traditional Tech-niques and Future-Ready Frameworks	International Con-ference On Computer Science And Communica-tion Engineering (Iccsce-2025)	ISSN (Online):2352-538X, ISSN (Print):2948-1961	Web of Science	June,2025

Faculty attended FDP/Workshop/Refresher course/Training Programs at Outside Campus

S.No.	Name of the Faculty	Nature of the program attended	Title of the Program	Date(s) attended	Sponsored body/Institute
1	P.Krishna Rao	FDP	Artificial Intelligence, Machine Learning and Deep Learning	06-01-2025 to 10-01-2025	E&ICT, IIT Roorkee
2	T. Jyotsna	ATAL - FDP (Online)	Future Trends in Deep Learning and Machine Learning Challenges and Applications	06-01-2025 to 11-01-2025	E&ICT, NIT Warangal
3	Dr S Vishwanath Reddy	FDP-NPTEL	Design and Analysis of Algorithms	Jan-March 2025	NPTEL
4	Dr S Vishwanath Reddy	FDP-NPTEL	Python for Data Science	Jan-March 2025	NPTEL
5	M Vishwashanthi	FDP-NPTEL	Design Thinking	Jan-March 2025	NPTEL
6	Dr J. Sudhakar	FDP-NPTEL	Python for Data Science	Jan-March 2025	NPTEL
7	Ms.V.Sravanthi	FDP-NPTEL	Data Analytics with Python	Jan-April 2025	NPTEL
8	K Padmaja	FDP-NPTEL	Discrete Mathematics	Jan-April 2025	NPTEL
9	Y.Siva	FDP-NPTEL	Introduction to Internet of Things	Jan-April 2025	NPTEL
10	E Mahender	FDP-NPTEL	Computer Vision and Image Processing - Fundamentals and Applications	Jan-April 2025	NPTEL
11	Bhujanga reddy Bhavanam	FDP-NPTEL	Problem Solving Through Programming In C	Jan-April 2025	NPTEL
12	A.Chandrakala	FDP-NPTEL	Problem Solving Through Programming In C	Jan-April 2025	NPTEL
13	M Swapna Rani	FDP-NPTEL	Graph Theory	Jan- March 2025	NPTEL
14	M Swapna Rani	FDP-NPTEL	Data Analytics with Python	Jan-Apr 2025	NPTEL

Faculty attended FDP/Workshop/Refresher course/Training Programs at Outside Campus

S.No.	Name of the Faculty	Nature of the program attended	Title of the Program	Date(s) attended	Sponsored body/Institute
15	M Swapna Rani	FDP-NPTEL	Programming, Data Structures and Algorithms Using Python	Jan- March 2025	NPTEL
16	K.Prathima	FDP-NPTEL	RESEARCH METHODOLOGY	Jan-March 2025	NPTEL
17	K Durga Kalyani	FDP-NPTEL	Graph Theory	Jan-March 2025	NPTEL
18	G.Anusha	FDP-NPTEL	Human Computer Interaction	Jan-April 2025	NPTEL
19	Sudha Singaraju	EICTIITR-FDP	Demystifying Machine Learning	20-01-2025 to 25-01-2025	Anurag University
20	D.S.V.Jyothi	EICTIITR-FDP	Demystifying Machine Learning	20-01-2025 to 25-01-2025	Anurag University
21	V.Shiva Narayana Reddy	EICTIITR-FDP	Demystifying Machine Learning	20-01-2025 to 25-01-2025	Anurag University
22	V.Sravanthi	FDP	ATAL-AICTE Introduction to Generative AI Models and applications	20-01-2025 to 25-01-2025	RVR &JC College of Engg
23	Dr.S.Radha	FDP	ATAL-AICTE Introduction to Generative AI Models and applications	20-01-2025 to 25-01-2025	RVR &JC College of Engineering
24	P.Krishna Rao	FDP	Image Processing and Pattern Recognition	20-01-2025 to 25-01-2025	E&ICT, IIT Roorkee
25	G.Niveditha	Workshop	Workshop on Implementation of NEP-2020	20-01-2025 to 24-01-2025	GCET
26	T.Neelima	EICTIITR-FDP	Demystifying Machine Learning	20-01-2025 to 25-01-2025	Anurag University

Faculty attended FDP/Workshop/Refresher course/Training Programs at Outside Campus

S.No.	Name of the Faculty	Nature of the program attended	Title of the Program	Date(s) attended	Sponsored body/Institute
27	Srinivas Mulkalapalli	ATAL - FDP (Online)	Deep Learning Intelligent Video Analytics and Computer Vision	21-01-2025 to 27-01-2025	P.A.College of Engineering, Karnataka
28	T. Jyotsna	ATAL - FDP (Online)	Deep Learning Intelligent Video Analytics and Computer Vision	21-01-2025 to 27-01-2025	P.A.College of Engineering, Karnataka
29	G. Krishna Lava Kumar	FDP	Gen- AI and ChatGPT Application in the Industry	27-01-2025 to 31-01-2025	EXCELR
30	K.PRATHIMA	FDP	Gen AI & Chat GPT Application in the Industry	27-01-2025 to 31-01-2025	SJC Institute of Technology,
31	Dr.K Raghu	ATAL - FDP (Online)	Advancements in Artificial Intelligence and Machine Learning for Modern Engineering Solutions	27-01-2025 to 01-02-2025	Kakatiya University
32	Dr. S Vishwanath Reddy	ATAL - FDP (Online)	Advancements in Artificial Intelligence and Machine Learning for Modern Engineering Solutions	27-01-2025 to 01-02-2025	Kakatiya University
33	Dr. S Vishwanath Reddy	ATAL - FDP (Online)	Deep Learning for Social Impact: Atomic Object Detection in Real-World Applications	03-02-2025 to 08-02-2025	Narsimha reddy Engineering College
34	K.PRATHIMA	ATAL – FDP	“Generative Ai Techniques, Tools, and Applications”	03-02-2025 to 08-02-2025	National Institute of technology, Delhi
35	Dr. S Vishwanath Reddy	ATAL - FDP (Online)	Quantum Computing	10-02-2025 to 15-02-2025	Chandigarh University
36	K.Prathima	ATAL – FDP	Next Gen Communications: Fundamentals and Future Perspective	10-02-2025 to 15-02-2025	Tirumala Engineering College
37	P.Ushashree	PDP	Mastering Edge Analytics and Prompt Engineering for Innovation in Teaching and Learning	11-02-2025 to 15-02-2025	Vardhamaan College of Eng.

Faculty attended FDP/Workshop/Refresher course/Training Programs at Outside Campus

S.No.	Name of the Faculty	Nature of the program attended	Title of the Program	Date(s) attended	Sponsored body/Institute
38	R.Sukruta	PDP	Mastering Edge Analytics and Prompt Engineering for Innovation in Teaching and Learning	11-02-2025 to 15-02-2025	Vardhamaan College of Eng.
39	A.Abhilasha, G.Uma Devi, P.Sobha Rani, DSV.Jyothi, P.Lalitha, A.Chandrakala, A Abhilasha	FDP	Cyber Security	14-02-2025 to 20-02-2025	EXCLR, Saptagiri University
40	Dr. S Vishwanath Reddy	ATAL - FDP (Online)	Supercomputing (High-Performance Computing, AI, Quantum Computing)	17-02-2025 to 22-02-2025	Amrita Vishwa Vidyapeetham, Coimbatore
41	P. Sobha Rani	FDP	Bridging with smart Technologies	17-02-2025 to 22-02-2025	SRU online
42	Dr. K Raghu	ATAL - FDP (Online)	Empowering Healthcare with AI and ML: Advances and Applications	17-02-2025 to 22-02-2025	KPR Institute of Engineering and Technology
43	Sonam Marathe, A Shiva Jyothi, A. Vijaya	FDP	Fundamentals of Python programming	17-02-2025 to 22-02-2025	IIT Kanpur
44	Dr.S.Radha	ATAL FDP	Deep Learning and computer Vision in the field of Clinical Research	17-2-2025 to 22-2-2025	AICTE, Thiagarajar College of Engineering
45	Ms.V.Sravanthi	FDP	Bridging with smart Technologies	17-02-2025 to 22-02-2025	SRU online
46	G.Anusha	FDP	Generative AI-Exploring the Boundaries of Creative Intelligence	22-02-2025 to 28-02-2025	CVR College of Engineering
47	A Shiva jyothi	FDP	Data Structures and Algorithms (with java)	24-02-2025 to 01-03-2025	IIT Kanpur

Faculty attended FDP/Workshop/Refresher course/Training Programs at Outside Campus

S.No.	Name of the Faculty	Nature of the program attended	Title of the Program	Date(s) attended	Sponsored body/Institute
48	V.Sravanthi	FDP	Deep Learning and Optimization for Health Care	24-2-2025 to 04-03-2025	Ministry of Electronics and Information Technology
49	K.Ashwini	FDP	Full Stack Development with PHP &MySql	24-02-2025 to 01-03-2025	E&ICT Academy, IIT Kanpur
50	A Abhilasha	FDP-NPTEL	Foundation of Cloud IoT Edge ML	Feb - April 2025	NPTEL
51	Dr. Neha Nandal	FDP	Advances in Artificial Intelligence for Image Processing and Medical Applications	03-03-2025 to 07-03-2025	Electronics and ICT Academy, NIT Patna
52	Dr J. Sudhakar	Workshop	Deep Learning Techniques using TensorFlow and Python	06-03-2025 to 07-03-2025	Vellore Institute of Technology, Vellore
53	P Krishna Rao	FDP(Online)	Big Data Analytics and High Performance Computing	05-03-2025 to 09-03-2025	E&ICT, IIT Roorkee
54	Bhujangareddy Bhavanam	FDP	Workplace Communication	March-May-2025	GCET
55	A.Durga Pavani	Coursera-Course	Speaking to Inspire: Ceremonial and Motivational Speeches	04-03-2025	Coursera
56	P.Ushasree	FDP	Revolutionizing Data Analytics, Power BI,AI and Optimization Techniques	12-03-2025 to 16-03-2025	SR University Online National level
57	P.Ushasree	FDP	NLP with CHAT GPT	17-03-2025 to 19-03-2025	SaiRam Institute of Technology, Chennai
58	Dr J. Sudhakar	FDP(Online)	Blockchain and its Application	17-03-2025 to 21-03-2025	R K College of Engineering, Chennai

Faculty attended FDP/Workshop/Refresher course/Training Programs at Outside Campus

S.No.	Name of the Faculty	Nature of the program attended	Title of the Program	Date(s) attended	Sponsored body/Institute
59	Dr J. Sudhakar	FDP (Online)	Generative Al & The Future of Network Security Emerging Trends	24-03-2025 to 28-03-2025	GNI, Hyderabad
60	D.Venkateswarlu	FDP (online)	Cloud-Native Paradigms and Emerging Trends in Container Orchestration	15-04-2025 to 19-04-2025	Vardhaman College of Engineering
61	Y.Siva, E.Mahender, A.Durga Pavani, Bh.Bhujanga Reddy, A.Chandrakala, M Swapna Rani, K. Durga Kalyani, P. Sobha Rani, D.Savitri Vishwa Jyothi, P.Lalitha	Malaviya Mission Teacher Training Programme	NEP 2020 Orientation & Sensitization Programme	19-05-2025 to 29-05-2025	UGC-MMTTC, University of Kerala, Thiruvananthapuram
62	G. Uma Devi, V. Sravanthi, B. Mamatha	Malaviya Mission Teacher Training Programme	NEP 2020 Orientation & Sensitization Programme	02-06-2025 to 13-06-2025	UGC-MMTTC, University of Kerala, Thiruvananthapuram

Student Article

Fog Computing: Bringing Intelligence Closer to the Edge

With the rapid growth of Internet of Things (IoT) devices—from smart home assistants to industrial sensors - massive amounts of data are generated every moment. Traditionally, this data is sent to Cloud servers for processing. However, as device numbers increase, sending all data to distant cloud data centers causes delays, bandwidth congestion, and slower response times. To solve this challenge, a new model called Fog Computing has emerged.

What is Fog Computing?

Fog Computing is a decentralized computing architecture that extends the cloud to the edge of the network. Instead of sending all data to the cloud, fog computing allows data to be processed locally closer to where it is generated. This significantly reduces latency and improves efficiency.

Fog computing typically involves:

- IoT Devices (Sensors, smart appliances, machines)
- Fog Nodes (Gateways, routers, micro-servers)
- Cloud Servers (Used only for storage and long-term analytics) It acts as a bridge between IoT devices and cloud computing systems.

How Fog Computing Works:

- Data is generated by IoT devices (e.g., sensors in a smart factory).
- Instead of sending all data directly to the cloud, it goes to a fog node located nearby.
- The fog node processes, analyzes, filters, and stores necessary data locally.
- Only important or long-term data is forwarded to the cloud for historical analysis, reporting, or machine learning. This allows real-time decision-making without depending on distant servers.

Advantages of Fog Computing:

Low Latency: Decisions are made instantly near the data source.

Reduced Bandwidth Usage: Only useful data goes to the cloud.

Enhanced Security: Sensitive data remains within local networks.

Scalability: Can support millions of connected devices.

Challenges:

Complex setup and management due to multiple distributed nodes.

Security risks if fog nodes are not properly protected.

Standardization issues as technology is still evolving.

Conclusion:

Fog computing is rapidly becoming a key enabler of advanced IoT systems. By moving computation closer to where data is created, it enables faster decision-making, reduced network load, and improved privacy. As the world moves toward smart environments—smart homes, smart cities, smart healthcare, fog computing will play a central role in shaping a more connected and intelligent future.

Ms. P. ANANYA (23R11A05M1)
II Year

Student Articles

Quantum Computing: The Next Leap in Computational Power

What is Quantum computing?

Quantum computing is a multidisciplinary field comprising aspects of computer science, physics, and mathematics that utilizes quantum mechanics to solve complex problems faster than on classical computers. The field of quantum computing includes hardware research and application development. Quantum computers are able to solve certain types of problems faster than classical computers by taking advantage of quantum mechanical effects, such as superposition and quantum interference. Some applications where quantum computers can provide such a speed boost include machine learning (ML), optimization, and simulation of physical systems. Eventual use cases could be portfolio optimization in finance or the simulation of chemical systems, solving problems that are currently impossible for even the most powerful supercomputers on the market.

What is the quantum computing advantage?

Currently, no quantum computer can perform a useful task faster, cheaper, or more efficiently than a classical computer. Quantum advantage is the threshold where we have built a quantum system that can perform operations that the best possible classical computer cannot simulate in any kind of reasonable time.

What is quantum mechanics?

Quantum mechanics is the area of physics that studies the behavior of particles at a microscopic level. At subatomic levels, the equations that describe how particles behave is different from those that describe the macroscopic world around us. Quantum computers take advantage of these behaviors to perform computations in a completely new way.

What is a qubit?

Quantum bits, or qubits, are represented by quantum particles. The manipulation of qubits by control devices is at the core of a quantum computer's processing power. Qubits in quantum computers are analogous to bits in classical computers. At its core, a classical machine's processor does all its work by manipulating bits. Similarly, the quantum processor does all its work by processing qubits.

How are qubits different from classical bits?

In classical computing, a bit is an electronic signal that is either on or off. The value of the classical bit can thus be one (on) or zero (off). However, because the qubit is based on the laws of quantum mechanics it can be placed in a superposition of states.

What are the principles of quantum computing?

A quantum computer works using quantum principles. Quantum principles require a new dictionary of terms to be fully understood, terms that include superposition, entanglement, and decoherence. Let's understand these principles below.

Superposition

Superposition states that, much like waves in classical physics, you can add two or more quantum states and the result will be another valid quantum state. Conversely, you can also represent every quantum state as a sum of two or more other distinct states. This superposition of qubits gives quantum computers their inherent parallelism, allowing them to process millions of operations simultaneously.

Quantum Computing: The Next Leap in Computational Power

Entanglement

Quantum entanglement occurs when two systems link so closely that knowledge about one gives you immediate knowledge about the other, no matter how far apart they are. Quantum processors can draw conclusions about one particle by measuring another one. For example, they can determine that if one qubit spins upward, the other will always spin downward, and vice versa. Quantum entanglement allows quantum computers to solve complex problems faster.

When a quantum state is measured, the wavefunction collapses and you measure the state as either a zero or a one. In this known or deterministic state, the qubit acts as a classical bit. Entanglement is the ability of qubits to correlate their state with other qubits.

Decoherence

Decoherence is the loss of the quantum state in a qubit. Environmental factors, like radiation, can cause the quantum state of the qubits to collapse. A large engineering challenge in constructing a quantum computer is designing the various features that attempt to delay decoherence of the state, such as building specialty structures that shield the qubits from external fields.

What are the components of a quantum computer?

Quantum computers have hardware and software, similar to a classical computer. Quantum hardware has three main components.

Quantum data plane: The quantum data plane is the core of the quantum computer and includes the physical qubits and the structures required to hold them in place.

Control and measurement plane: The control and measurement plane converts digital signals into analog or wave control signals. These analog signals perform the operations on the qubits in the quantum data plane.

Control processor plane and host processor: The control processor plane implements the quantum algorithm or sequence of operations. The host processor interacts with the quantum software and provides a digital signal or classical bits sequence to the control and measurement plane.

Quantum software: Quantum software implements unique quantum algorithms using quantum circuits. A quantum circuit is a computing routine that defines a series of logical quantum operations on the underlying qubits. Developers can use various software development tools and libraries to code quantum algorithms.

References:

[1] https://aws.amazon.com/what-is/quantum-computing/

[2] https://www.investopedia.com/terms/q/quantum-computing.asp

3] https://www.nist.gov/quantum-information-science/quantum-computing-explained

Ms. V. SAI SHRIYA
(22R11A05U6)
III Year

Industry 4.0
Fourth Industrial Revolution

Industry 4.0—also called the Fourth Industrial Revolution or 4IR—is the next phase in the digitization of the manufacturing sector, driven by disruptive trends including the rise of data and connectivity, analytics, human-machine interaction, and improvements in robotics.

What is the Fourth Industrial Revolution?

Steam propelled the original Industrial Revolution; electricity powered the second; preliminary automation and machinery engineered the third; and cyber physical systems or intelligent computers are shaping the Fourth Industrial Revolution.

Before 2014, the Google search term "Industry 4.0" was practically nonexistent, but by 2019, 68 percent of respondents to a McKinsey global survey regarded Industry 4.0 as a top strategic priority. Seventy percent said their companies were already piloting or deploying new technology

4IR builds on the inventions of the Third Industrial Revolution or digital revolution which unfolded from the 1950s and to the early 2000s and brought us computers, other kinds of electronics, the Internet, and much more. Industry 4.0 brings these inventions beyond the previous realm of possibility with four foundational types of disruptive technologies (examples below) that can be applied all along the value chain:

1. connectivity, data, and computational power: cloud technology, the Internet, blockchain, sensors
2. analytics and intelligence: advanced analytics, machine learning, artificial intelligence
3. human–machine interaction: virtual reality (VR) and augmented reality (AR), robotics and automation, autonomous guided vehicles
4. advanced engineering: additive manufacturing (such as, 3-D printing), renewable energy, nano particles.

To thrive in the Fourth Industrial Revolution, companies must ensure that their workers are properly equipped through upskilling and reskilling and then hire new people when necessary. Upskilling means that employees learn new skills to help them in their current positions as the skills they need evolve. Reskilling is the real challenge: workers are retrained with new skills that will enable them to fill different positions within their companies.

This is increasingly vital as disruptive technologies transform job requirements, but the outlook on reskilling differs geographically. In Europe, 94 percent of surveyed executives believe that the balance between hiring and reskilling should be equal or tip toward reskilling, compared with only 62 percent of US respondents.

The end-to-end skill transformation has three phases:

scout—analyze the skills required to achieve a company's ambitions

shape—identify talent gaps that must be addressed and design the program infrastructure to address them

shift—develop and implement content and delivery mechanisms to train workers at scale.

How about Industry 4.0 digitization and opportunities for sustainability?

The Fourth Industrial Revolution creates opportunities for sustainability and, more important, these advances are inherently more sustainable than current business practices. Some people think productive operations are hard to square with environmental responsibility, but sustainable lighthouses challenge that notion: 4IR transformations facilitate a viable kind of eco-efficiency that intrinsically meshes sustainability with competitive excellence.

Industry 4.0

Eco-efficiency includes three dimensions of digital technology:

1. Enabling data-informed actions in production and the broader end-to-end value chain
2. Realizing improvements across performance indicators, such as cost, agility, convenience, and quality
3. Driving sustainability gains by limiting consumption, resource waste, and emissions.

Consider a few examples of how Industry 4.0 technologies that maximize efficiency also minimize waste:

- One Singapore lighthouse decreased its scrap output from building semiconductors by 22 percent in a smart factory enabled by the industrial Internet of Things, or IIoT. (See a related Explainer, "What is the Internet of Things?," for more.)
- Schneider Electric's smart factory in Lexington, Kentucky, combined IoT connectivity and predictive analytics to lower energy use by 26 percent, CO_2 emissions by 30 percent, and water use by 20 percent.
- Sixty percent of the 103 lighthouses identified by the Global Lighthouse Network include sustainability among their top five Fourth Industrial Revolution use cases.

And more broadly, lighthouses demonstrate how 4IR technologies can promote responsible growth in the long term. How? Through action in three broad areas:

Environmental: Taking care of our planet and the surrounding environment. Areas of focus for lighthouses in this category include energy, water, waste, greenhouse-gas emissions, and the circular economy.

Social: Building a stronger workforce and community. For lighthouses, focus areas might include human-capital development, the voice of the worker, health and safety, and labor standards.

Governance: Establishing a set of practice, controls, and procedures to govern, make decisions, and meet the needs of stakeholders. This can encompass focus areas such as ownership, accountability, business ethics, and governance structure.

What is Industry 4.0's impact on the economy?

Industry 4.0 will continue to have a significant impact on the economy. The greatest economic boons will go to the fastest-acting companies. According to a 2018 McKinsey Global Institute analysis, Industry 4.0 front-runners - facilities well on their way to adopting AI and other advanced technologies by 2025 - can expect a 122 percent positive cash flow change. Follower companies can expect just 10 percent, while companies that wholly fail to adopt AI could see a 23 percent downturn.

Industry 4.0 is also projected to transform the skill sets of the workforce by shifting the standards for sought-after talent. Over the coming decade, we will see these changes as more and more companies embrace robotics:

- Demand for physical and manual skills in repeatable tasks, like those on assembly lines, will decline by nearly 30 percent.
- Demand for basic literacy and numeracy skills will decline by almost 20 percent.
- Demand for technological skills such as coding will rise by more than 50 percent.
- Demand for complex cognitive skills will rise by about 33 percent.
- Demand for high-level social and emotional skills will rise by more than 30 percent.
- In 2025, the value creation potential of Industry 4.0 for manufacturers and suppliers is expected to reach $3.7 trillion.

Mr. KEERTI TEJA SRI CHARAN
(23R11A0524)
II Year

Serverless Computing: Redefining Application Deployment

As organizations continue to adopt cloud technologies, the way applications are built and deployed is rapidly evolving. One major innovation driving this change is Serverless Computing. Despite the name, servers are still involved—but the key difference is that developers no longer need to manage those servers. Instead, cloud providers handle all infrastructure activities automatically, allowing developers to focus solely on writing code.

What is Serverless Computing?

Serverless computing is a cloud execution model where the cloud provider (such as AWS, Azure, or Google Cloud) dynamically manages the allocation of computing resources. Developers deploy application functions, and these functions run only when triggered, such as by a web request, database change, or scheduled event.

Since resources are allocated only when needed, users pay only for the actual execution time, not for idle server capacity. This leads to significant cost savings and simplified application development.

How Serverless Computing Works:

1. A developer writes small, modular pieces of code called functions.
2. The functions are uploaded to a serverless platform (e.g., AWS Lambda).
3. When an event occurs (like a user request, message, or file upload), the platform automatically executes the function. Once the function completes, the resources are released until needed again.

This model eliminates the need to:

- Configure or maintain servers
- Scale hardware manually

Handle operating system or security patch updates

Benefits of Serverless Computing:

Benefit	Description
Cost Efficiency	Pay only for actual code execution time. No charge for idle resources.
Automatic Scaling	System automatically expands or reduces resources based on demand.
Faster Development	Developers focus on code instead of server setup and maintenance.
Reduced Operational Complexity	Cloud provider handles monitoring, updates, and fault tolerance.

Applications of Serverless Computing:

1. Web and Mobile Backends 2. Real-Time Data Processing 3. Chatbots and Virtual Assistants.
4. Automation and Scheduling 5. Machine Learning Workflows.

Challenges:

- Cold Start Delays: Initial execution may take slightly longer if the function is not already active.
- Vendor Lock-In: Applications may become tied to a specific cloud provider's architecture.
- Debugging Complexity: Distributed execution makes debugging harder than traditional systems.

Ms. ADAPA MEENAKSHI
(24R15A0501)

Social Engineering Attacks

Social engineering is one of the most dangerous cyber threats today because it targets human behavior rather than technical vulnerabilities. Instead of hacking systems, cybercriminals manipulate people to reveal confidential information, click malicious links, or perform harmful actions. Common examples include phishing emails, fake phone calls, impersonation, and malicious messages through social media or SMS.

Types of Social Engineering Attacks:

Phishing: Fake emails or websites designed to steal sensitive data like passwords or bank details.
Vishing: Phone calls where attackers pretend to be officials or support agents.
Smishing: Fraudulent text messages with dangerous links or requests.
Pretexting: Attackers create a story or fake identity to gain trust.
Baiting: Offering free downloads, gifts, or misleading pop-ups to trick users into installing malware.
Tailgating: Physically following someone into a restricted area without authorization.

Identification of Social Engineering Attempts:

- Recognizing suspicious behavior is the first line of defense. Warning signs include:
- Messages that create urgency (e.g., "Your account will be blocked in 30 minutes")
- Poor grammar, spelling mistakes, and unfamiliar sender addresses
- Requests for personal information, passwords, OTPs, or bank numbers
- Unexpected attachments or links
- Offers that seem “too good to be true”
- Unusual behavior from known contacts (possible account compromise)

Prevention Strategies:

Preventing social engineering requires awareness, careful behavior, and strong security practices. Some effective preventive measures are:

- Think before clicking: Avoid opening unknown links or attachments.
- Verify identity: Confirm the sender through another channel if unsure.
- Use multi-factor authentication (MFA) to protect accounts even if passwords leak.
- Update and patch systems regularly to avoid technical exploitation.
- Use strong, unique passwords and avoid sharing them.
- Be cautious with public Wi-Fi, especially when banking or logging in.
- Limit sharing on social media, as attackers use personal data to gain trust.

Training and awareness programs are essential because the weakest link in security is often the human user.

Detection Techniques: Organizations and individuals can use the following methods to detect social engineering attempts:

- Email filters and spam detection systems
- Security information and event monitoring (SIEM) tool
- Behavior analysis tools that identify unusual access
- Reporting systems for suspicious messages or calls
- Regular audits and simulated phishing tests
- Antivirus and anti-malware monitoring

Mr. AKSHAD MISHRA
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II Year

The Power of Computer Vision in AI: Unlocking the Future

Computer vision is an artificial intelligence domain instructing computers to comprehend and interpret visual data. Leveraging digital images sourced from cameras and videos, coupled with advanced deep learning algorithms, computers adeptly discern and categorize objects, subsequently responding to their visual environment with precision.

Key Aspects of Computer Vision:

Image Recognition: It is the most common application, in which the system identifies a specific object, person, or action in an image.

Object Detection: This involves recognizing multiple objects within an image and identifying their location with a bounding box. This is widely used in AI applications such as self-driving cars, where it's necessary to recognize all relevant objects around the vehicle.

Image Segmentation: This process partitions an image into multiple segments to simplify or change the representation of an image into something more meaningful and easier to analyze. It is commonly used in medical imaging.

Facial Recognition: This is a specialized application of image processing where the system identifies or verifies a person from a digital image or video frame.

Motion Analysis: This involves understanding the trajectory of moving objects in a video, commonly used in security, surveillance, and sports analytics.

Machine Vision: This combines computer vision with robotics to process visual data and control hardware movements in applications such as automated factory assembly lines.

How Does Computer Vision Work?

Computer vision enables computers to interpret and understand digital images and videos to make decisions or perform specific tasks. The process typically starts with image acquisition, capturing visual data through cameras and videos. This data then undergoes preprocessing, including normalization, noise reduction, and conversion to grayscale to enhance image quality. Feature extraction follows, isolating essential characteristics such as edges, textures, or specific shapes from the images. Using these features, the system performs tasks like object detection (identifying and locating objects within the image) or image segmentation (dividing the image into meaningful parts).

Advanced algorithms, particularly Convolutional Neural Networks (CNNs), are often employed to classify and recognize objects accurately. Finally, the analyzed data can be used to make decisions or carry out actions, completing the computer vision process. This enables applications across various fields, from autonomous driving and security surveillance to industrial automation and medical imaging.

Image analysis using computer vision:

Image analysis using computer vision involves extracting meaningful information from images through various computational techniques. This process is fundamental in numerous applications across multiple industries, including healthcare, automotive, security, and entertainment.

Here's a breakdown of how image analysis is typically conducted using computer vision technologies:

1. Image Preprocessing:

Before analysis, images often undergo preprocessing to improve their quality and enhance important features for further image processing. Common preprocessing steps include:

The Power of Computer Vision in AI: Unlocking the Future

Grayscale Conversion: Reducing the image to grayscale to simplify the analysis by eliminating the need to process color. **Noise Reduction:** Applying filters to smooth out the image and reduce noise that could interfere with analysis. **Normalization:** Adjusting the pixel intensity for uniformity.

Edge Detection: Highlighting the edges in the image to better define boundaries and shapes.

2. Feature extraction involves identifying and isolating various characteristics or attributes of an image. Features might include shapes, textures, colors, or specific patterns. Effective feature extraction is crucial as it directly influences the accuracy and efficiency of the subsequent analysis phases.

3. Segmentation divides an image into multiple segments to simplify and change the representation of the image into something more meaningful. There are different methods of segmentation:

Thresholding: Separating pixels based on a predefined criterion.

Region-based Segmentation: Dividing an image into regions according to predefined criteria.

Edge-based Segmentation: Detecting edges to find boundaries.

Clustering: Grouping pixels into clusters based on similarity.

4. Object Detection and Recognition:

This step involves identifying objects within an image and classifying them into known categories. This can be achieved through various methods:

Template Matching: Comparing different parts of an image to a template to detect the presence of specific objects.

Machine Learning: Using trained algorithms to recognize objects. This typically involves training a model on a large dataset with labeled images.

Deep Learning: Applying Convolutional Neural Networks (CNNs) that can automatically detect and classify various objects in an image with high accuracy.

5. Analysis and Interpretation:

After detecting and classifying objects, the system analyzes the context or changes over time (in the case of video) to derive insights. This step might involve:

Pattern Recognition: Identifying patterns or anomalies within an image.

Statistical Analysis: Calculating various statistics, like object counts or size distributions.

Machine Vision: Interpreting images to guide action (e.g., in robotic process automation).

6. Decision Making

The final step involves making decisions based on the analyzed data. This can range from triggering an alert when a certain object is detected to providing diagnostic insights in medical imaging.

Tools and Libraries:

OpenCV: A highly versatile library used for real-time computer vision.

TensorFlow and PyTorch: Popular frameworks for deep learning applications, including image classification and object detection.

MATLAB Image Processing Toolbox: Provides a comprehensive suite of reference standard algorithms and graphical tools for image processing, analysis, visualization, and algorithm development.

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III Year

Zero Day Vulnerability

From time to time, vulnerabilities are discovered in computing systems. These vulnerabilities represent security holes that allow attackers to gain unauthorized access to, damage or compromise a system. Known vulnerabilities are documented in public repositories such as the National Vulnerability Database (NVD).

Both software vendors and independent security researchers are constantly on the lookout for new vulnerabilities in software products. When a vulnerability is discovered, it is the software vendor's responsibility to quickly issue a patch that addresses the security issue – users of the software can then install the patch to protect themselves.

A zero-day (or 0-day) attack is a software vulnerability exploited by attackers before the vendor has become aware of it. At that point, no patch exists, so attackers can easily exploit the vulnerability knowing that no defenses are in place. This makes zero-day vulnerabilities a severe security threat.

Once attackers identify a zero day vulnerability, they need a delivery mechanism to reach the vulnerable system. In many cases the delivery mechanism is a socially engineered email – an email or other message that is supposedly from a known or legitimate correspondent, but is actually from an attacker. The message tries to convince a user to perform an action like opening a file or visiting a malicious website, unwittingly activating the exploit.

A zero-day attack typically proceeds as follows:

Looking for vulnerabilities – attackers search through code or experiment with popular applications, looking for vulnerabilities. They may also buy vulnerabilities on the black market.

Exploit code created – attackers create a malware program or other technical means to exploit the vulnerability.

Looking for systems affected by the vulnerability – attackers can use bots, automated scanners and other methods to identify systems that suffer from the vulnerability.

Planning the attack – in a targeted attack on a specific organization, attackers may carry out detailed reconnaissance to identify the best way to penetrate the vulnerable system. In a non-targeted attack, attackers will typically use bots or massive phishing campaigns to try to penetrate as many vulnerable systems as possible.

Infiltration – an attacker gets through the perimeter defenses of an organization or personal device.

Zero-day exploit launched – attackers are now able to execute code remotely on the compromised machine.

Who are the Attackers?

Threat actors who plan and carry out zero-day attacks can belong to several categories:

Cybercriminals— hackers whose primary motive is typically financial.

Hacktivists— attackers motivated by an ideology, they will typically want attacks to be highly visible to help them in their cause.

Corporate espionage— attackers who aim to illicitly gain private information from other organizations.

Cyberwarfare— in recent years nation states and national security bodies have often resorted to cyberthreats against another country's infrastructure, or organizations within another country that represent critical infrastructure (for example, the Stuxnet attack).

Zero Day Vulnerability

Targeted vs. Non-Targeted Zero-Day Attacks:

Targeted zero-day attacks are carried out against high profile targets, such as government or public institutions, large organizations, and senior employees who have privileged access to corporate systems, access to sensitive data, intellectual property or financial assets.

Non-targeted zero-day attacks are typically waged against a large number of home or business users who use a vulnerable system, such an operating system or browser. Often, the attacker's goal will be to compromise these systems and use them to build massive botnets. A recent example was the Wanna-Cry attack, which used the EternalBlue exploit in the Windows SMB file protocol to compromise over 200,000 machines in one day. Non-targeted attacks can also target hardware, firmware and Internet of Thing (IoT).

Examples of Zero-Day Attacks:

The following are three examples of high profile zero-day attacks, illustrating the severe risk zero-day attacks pose for organizations.

Stuxnet: Stuxnet was labeled as the world's first cyber weapon. It was malware was used to break into Iran's uranium enrichment centrifuges in 2006. Many experts believe that the National Security Agency (NSA) created the zero-day exploit. Stuxnet infected a specific industrial control system, and sped up or slowed down the centrifuges to the point where they destroyed themselves. During this process Iranian monitoring systems made it appear that systems were operating normally.

RSA: In 2011, attackers used an unpatched vulnerability in Adobe Flash Player to gain entry into the network of security vendor RSA. The attackers distributed emails via Excel spreadsheet attachments to RSA employees; the attachments activated a Flash file, which exploited the zero-day Flash vulnerability. The data stolen included key information used by RSA customers in SecurID security tokens.

Sony: In 2014, a zero-day attack targeted Sony Pictures. While the details of the vulnerability exploited in the attack remain unknown, the attack brought down Sony's network, and attackers leaked sensitive corporate data on file sharing sites, including personal information about Sony employees and their families, internal correspondence, information about executive salaries, and copies of unreleased Sony films. Attackers used a variant of the Shamoon wiper malware to erase multiple systems on Sony's corporate network.

Zero Day Protection and Prevention:

Windows Defender Exploit Guard – a security tool built into Windows 2010, which has several capabilities that can effectively protect against zero day attacks. It can be a first line of defense against zero-day attacks targeting Windows endpints.

Next-Generation Antivirus (NGAV)-Next Generation Antivirus (NGAV) solutions leverage threat intelligence, behavioral analytics, machine learning code analysis and dedicated anti-exploit techniques which can be effective against some zero-day attacks.

Patch Management – establishing a formal process, and implementing automated tools, can help organizations detect systems in need of patching, obtain the patches and deploy them quickly, before attackers can strike with a zero-day attack.

Incident Response Plan – having a specific plan focused on zero-day attacks can reduce confusion and increase the chances of detecting, mitigating and reducing the damage caused by zero-day attacks.

Ms. R. Krishna Sri
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Angular vs ReactJS: Which one to Choose as Frontend Development Framework

Angular and ReactJS are two popular tools for building modern web applications, but they approach things a bit differently. In today's dynamic web development, selecting the most suitable framework is critical for building efficient and scalable web applications. Both frameworks have large communities, vast libraries, and the capability to create amazing user experiences. But with their distinct strengths and weaknesses, deciding which one best aligns with your goals can be a challenge.

What is Angular JS?

Angular is a powerful, open-source web application framework, particularly for single-page applications (SPA's) and enterprise-level applications developed by Google. Angular is built with TypeScript, which adds static typing to JavaScript, providing early error detection and making large codebases easier to maintain. Angular now uses a component-based architecture instead of the traditional Model-View-Controller (MVC) pattern, making it more modular and adaptable. Angular's developer experience and performance improvements are top priorities in recent versions. Notably, Angular v19 introduces incremental hydration, event replay, route-level render modes, and many more features focused on optimizing performance and enhancing user experience.

Key Features of Angular JS:

Ivy Rendering Engine: Angular's default rendering engine, Ivy, improves performance with smaller bundle sizes and optimized tree-shaking. It also allows for better change detection and faster rendering.

Standalone Components: Angular supports standalone components, allowing you to create components that do not require modules. This reduces the complexity of application architecture and simplifies development.

TypeScript Integration: Angular is built with TypeScript, offering strong typing, interfaces, and other object-oriented programming features. This improves code maintainability and reduces errors.

RxJS and Reactive Programming: Angular uses RxJS for reactive programming, allowing developers to manage asynchronous data streams efficiently.

CLI and Built-In Tools: Angular's CLI helps automate common development tasks such as project setup, testing, and building, making development easier.

What is ReactJS?

ReactJS, developed by Meta (formerly Facebook), is a JavaScript library for building user interfaces. Unlike Angular, React focuses solely on the view layer of the application and leaves routing, state management, and other concerns to third-party libraries. React relies on a virtual DOM, which improves performance by minimizing direct updates to the actual DOM. Its philosophy of "one-way data flow" and its use of components makes it one of the most flexible frameworks available.

Key Features of ReactJS:

Concurrent Mode: React's Concurrent Mode enables apps to perform tasks in the background, improving the responsiveness of user interfaces. This allows React to work efficiently on large applications by rendering components asynchronously.

Virtual DOM: React uses a Virtual DOM, optimizing updates by only re-rendering components that have changed, which boosts performance.

Angular vs ReactJS: Which one to Choose as Frontend Development Framework

React Server Components: React introduced Server Components, which allow developers to render some parts of the UI on the server side, reducing client-side rendering and improving performance.

Hooks: React continues to use Hooks (useState, useEffect, useReducer, etc.), making it easier to manage state and side effects in functional components.

JSX and Flexibility: React allows you to write HTML-like code within JavaScript using JSX, making the UI declarative and intuitive. React also allows you to mix and match libraries for state management, routing, and more.

Which One to Choose as a Frontend Development Framework?

When to Choose Angular in 2025?

Enterprise Applications: Angular is ideal for building large-scale, enterprise-level applications with complex requirements, thanks to its comprehensive feature set.

Full-Featured Framework: If you want a batteries-included framework with built-in solutions for routing, state management, and form handling, Angular is the better option.

TypeScript Adoption: Angular is built using TypeScript, making it the perfect choice for teams already familiar with this language.

When to Choose ReactJS:

Single-Page Applications (SPAs): React is best suited for single-page applications where performance and fast rendering are crucial.

Mobile Development: React Native makes it easy to develop cross-platform mobile apps, making React a great choice for mobile-first development.

Flexibility and Customization: If you want a flexible, modular architecture that allows you to integrate with third-party libraries for state management, routing, and more, React is the better choice.

Lightweight Projects: React works well for smaller projects where you don’t need the full complexity of Angular and want to focus on UI development.

The choice depends on your specific project needs and the level of control and flexibility required.

Conclusion:

Both Angular and ReactJS are powerful tools, each with its own strengths and trade-offs. In the end, the choice between Angular and ReactJS depends on your project's requirements, team expertise, and future scalability needs. If you're looking for a comprehensive solution with strong typing and built-in features, Angular is the way to go. If you're looking for flexibility and a modular approach, ReactJS is the better option.

Mr. M.TARUN VENKAT
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II Year

Stress Management Techniques for Students

A study by the American Psychological Association (APA) found that teens report stress levels similar to adults. This means teens are experiencing significant levels of chronic stress and feel their stress levels generally exceed their ability to cope effectively. According to one Pew Research Center report, 70% of teens view anxiety and depression as major problems for people their age.

Stress Management Techniques:

1. Get Enough Sleep, Listen to Music, Eat a Healthy Diet

2. Use Guided Imagery: Guided imagery can also be a useful and effective tool to help stressed students cope with academic, social, and other stressors. Visualizations can help you calm down, detach from what's stressing you, and reduce your body's stress response.

You can use guided imagery to relax your body by sitting in a quiet, comfortable place, closing your eyes, and imagining a peaceful scene. Spend several minutes relaxing as you enjoy mentally basking in your restful image.

3. Exercise Regularly:

Finding time for exercise might be a challenge, but there are strategies that you can use to add more physical activity to your day. Some ideas that you might try include:

- Doing yoga in the morning, Walking or biking to class
- Reviewing for tests with a friend while walking on a treadmill at the gym
- Taking an elective gym class focused on leisure sports or exercise, Joining an intramural sport

4. Take Calming Breaths: A quick way to calm down is to practice breathing exercises. These can be done virtually anywhere to relieve stress in minutes.

Because they are fast-acting, breathing exercises are a great way to cope with moments of acute stress, such as right before an exam or presentation. But they can also help manage longer-lasting stress such as dealing with relationships, work, or financial problems.

Practice Progressive Muscle Relaxation (PMR): This technique involves tensing and relaxing all muscles until the body is completely relaxed. With practice, you can learn to release stress from your body in seconds. This can be particularly helpful for students because it can be adapted to help relaxation efforts before sleep for a deeper sleep.

5. Try Mindfulness: Mindfulness involves becoming more aware of the present moment. Rather than judging, reacting, or avoiding problems, the goal is to focus on the present, become more aware of how you are feeling, observe your reactions, and accept these feelings without passing judgment on them.

6. Build Your Support Network: Look for opportunities to meet new people, whether it involves joining study groups or participating in other academic, social, and leisure activities.

One way to improve your ability to manage student stress is to look for ways you cut stress out of your life altogether. Evaluate the things that are bringing stress or anxiety into your life. Are they necessary? Are they providing more benefits than the toll they take on your mental health? If the answer is no, sometimes the best option is just to ditch them altogether.

Mr. SAGAR SHARMA
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III Year

Federated Learning: A Decentralized Approach to Machine Learning

As the world generates massive amounts of digital data, machine learning models rely heavily on this data to improve accuracy and performance. Traditional machine learning practices require data to be collected in a centralized server for model training. However, with increasing concerns about privacy, data protection laws (like GDPR), bandwidth limitations, and the rising need for secure data handling, centralization has become a major bottleneck. To address these challenges, a new paradigm called Federated Learning (FL) has emerged. Developed originally by Google, Federated Learning allows machine learning models to learn from decentralized data without transferring raw data to a central location, making it more secure, scalable, and privacy-preserving.

What is Federated Learning?

Federated Learning is a distributed machine learning approach where a shared global model is trained across multiple devices or servers holding local data. Instead of moving data to the model, the model is sent to the data. Each participating device (called a client) trains the model locally using its own dataset and sends only the updated model parameters (weights or gradients) back to a central server. The server then aggregates these updates to create an improved global model.

How Federated Learning Works?

Initialization: A central server sends a global machine-learning model to multiple clients.
Local Training: Each client trains the model using its private data.
Update Sharing: The clients send only model updates (not data) to the server.
Aggregation: The server aggregates the updates using algorithms like FedAvg (Federated Averaging).
Global Model Improvement: The aggregated model is redistributed to all clients.
Repetition: The cycle continues until the model converges and reaches optimal performance.

Advantages of Federated Learning:

- Data Privacy: Sensitive user data never leaves the device.
- Reduced Bandwidth Usage: Only model parameters are shared, not raw datasets.
- Scalability: Can leverage thousands or millions of distributed devices.
- Compliance with Data Laws: Supports privacy regulations such as GDPR, HIPAA, and CCPA.
- Personalization: Models can adapt to user-specific patterns (e.g., language usage).

Challenges in Federated Learning:

- Non-uniform Data (Non-IID): Data across clients is often inconsistent and imbalanced.
- Communication Overhead: Frequent model updates may stress network resources.
- Security Threats: Vulnerable to attacks like model poisoning, adversarial updates, or data inference. Client Availability: Devices may go offline or experience performance limitations.

Real-World Examples:

- Google Gboard: Uses FL to improve keyboard suggestions without uploading user typing data.
- Apple Siri: Uses federated approaches to learn voice patterns while protecting user identity.
- NVIDIA Clara: Enables medical researchers to collaboratively train AI models from hospitals globally.

Conclusion

Federated Learning is reshaping the future of artificial intelligence by enabling secure, distributed, and privacy-preserving model training. As data privacy becomes a critical priority, FL serves as a powerful alternative to traditional centralized machine learning. With its growing use across smart phones, healthcare, finance, and autonomous systems, federated learning represents a major step toward responsible and scalable AI.

Ms. T.UmaDevi (23R11A0539)
II Year

Salesforce: Transforming Business through Cloud-Based CRM Solutions

Introduction

In today's digital economy, customer relationships have become the backbone of business success. Organizations across industries are shifting from traditional software systems to modern cloud-based platforms to manage sales, marketing, service, and analytics. Among these platforms, Salesforce stands out as one of the most widely adopted and influential Customer Relationship Management (CRM) solutions in the world. Founded in 1999, Salesforce pioneered the concept of delivering enterprise applications over the cloud, paving the way for the Software-as-a-Service (SaaS) revolution. Today, it is a leading CRM platform used by startups, educational institutions, government agencies, and multinational corporations.

What is Salesforce?

Salesforce is a cloud-based CRM platform that allows businesses to manage customer interactions, automate workflows, track sales activities, analyze customer data, and build customized applications—all without installing traditional on-premise software.

It provides a centralized ecosystem where sales teams, marketing professionals, customer support departments, and business managers can collaborate and work efficiently using real-time data.

Why Salesforce is popular?

- **100% Cloud-Based:** Accessible anytime, anywhere.
- **Highly Customizable:** Supports tailored applications and workflows.
- **Scalability:** Suitable for small businesses and global enterprises.
- **Security:** Advanced data protection and compliance frameworks.
- **Integration Support:** Works with ERP systems, social media, email platforms, and third-party applications.

Benefits of Salesforce:

- Improved Customer Experience, Better Sales Performance and Forecasting
- Automation of Manual Tasks, Centralized Customer Database
- AI-Driven Insights and Personalization, Faster Deployment and Upgrades

Core Features of Salesforce:

Feature	Description
Sales Cloud	Helps track leads, manage customer accounts, automate sales processes, and forecast revenue.
Service Cloud	Enables customer support teams to manage service requests, automate case resolution, and provide multi-channel assistance.
Marketing Cloud	Supports personalized customer engagement through email, SMS, and digital campaigns.
Commerce Cloud	Helps build and manage e-commerce platforms with integrated AI-based recommendations.
Tableau & Analytics Cloud	Provides business intelligence for data visualization and decision-making.
AppExchange	A marketplace for third-party apps and extensions.
Salesforce Einstein (AI)	A built-in AI engine offering predictive insights, automation, and intelligent analytics.

Salesforce: Transforming Business through Cloud-Based CRM Solutions

Customer relationship management or CRM is a tool that helps businesses manage their relationships with their customers. It allows companies to pay attention to their customers and associates. This can include buyers, suppliers, service providers, users, and anybody else with whom the company conducts business. Salesforce is a cloud-based CRM, there is no requirement of downloading or installing any software. People can simply log in to their Salesforce accounts and enjoy the services according to their subscription plans.

How does Salesforce CRM Works?

Salesforce CRM has the ability to manage customer interactions of an organization through several methods such as phone calls, email inquiries, communities, media, and social media. Salesforce is said to handle all customer relationships by focusing on sales, support, and marketing processes. All of this is done by working with standard objects, such as account, contact, lead, product, opportunity, etc., and advancing relationships between them.

Salesforce CRM is hosted on the cloud, which makes it very easy to use and readily accessible from anywhere. Salesforce CRM has an easy-to-understand infrastructure that helps developers. Applications can be built in just a few days or weeks in Salesforce CRM. Since there is no need to set up hardware or software, it is very cost-efficient as well.

What does Salesforce CRM Do?

CRM helps companies in various ways; some of them are mentioned below:

1. CRM helps to keep all customer-related data in one, easily accessible place. This enables everyone in the company to access the information whenever needed.
2. It helps in keeping track of all the interactions that the company has with customers via phone calls, emails, SMS, chats, and tickets.
3. It helps to keep a track of the history of a customer's relationship with the company, its length, purchasing history, etc.
4. CRM helps to standardize the sales process, helping your sales team close deals quicker. CRM also provides the sales team with a proper guide to close deals.
5. It helps to clarify why a deal must be stalling and/or how to address the problems of a specific customer.
6. CRM predicts sales pretty accurately, enabling you to make accurate forecasts.
7. It helps to speed up the process of training new sales representatives.
8. CRM gives detailed data about customer behavior and their interests. This keeps you focused on the customers.
9. CRM helps you predict customer needs so that you are prepared before they come to you.

Conclusion:

Salesforce has revolutionized CRM by offering a flexible, scalable, and cloud-driven platform that empowers businesses to build stronger customer relationships and make data-driven decisions. Its integration capabilities, AI-powered intelligence, and wide industry adoption make it one of the most essential tools for modern enterprises.

Ms. K. SRI SMRUTHI SRESHTA
(22R11A05Q7)
III Year

Kubernetes and Containerization: Revolutionizing Application Deployment

Introduction

Modern software development demands speed, scalability, automation, and flexibility. Traditional deployment methods often struggle with environment inconsistencies, scalability issues, and dependency conflicts. To overcome these challenges, the industry shifted toward containerization, and one of the most widely adopted technologies in this space is Kubernetes.

Containerization packages applications and their dependencies into portable, isolated units called containers. Kubernetes (often abbreviated as K8s) automates the deployment, scaling, and management of these containers across distributed environments, making it a foundational technology for cloud-native systems.

What Is Containerization?

Containerization is a lightweight virtualization technique where an application runs in an isolated environment while sharing the host operating system kernel. Unlike traditional virtual machines, containers do not require a separate OS, making them faster, smaller, and more efficient.

Advantages of Containerization:

- Fast deployment and startup
- Lightweight compared to virtual machines
- Portability across operating systems and cloud platforms
- Consistent environments from development to production
- Improved resource utilization
- Docker is currently the most widely used container engine in the industry.

What Is Kubernetes?

Kubernetes is an open-source platform originally developed by Google for automating container orchestration. Its primary purpose is to manage containerized applications at scale. Kubernetes ensures applications run efficiently across clusters of machines — automatically handling deployment, scheduling, scaling, healing, and load balancing.

How Kubernetes Works: A Simple Workflow:

- Developer builds a container image (e.g., using Docker).
- The image is uploaded to a container registry.
- A deployment configuration is created in Kubernetes (usually using YAML).
- Kubernetes schedules pods to run on available nodes.
- Kubernetes monitors application health and scales as needed.

Core Components of Kubernetes:

Component	Function
Pod	Smallest deployable unit containing one or more containers
Node	Worker machine running pods
Cluster	Group of nodes managed as a single system

Kubernetes and Containerization: Revolutionizing Application Deployment

Key Features of Kubernetes:

Feature	Purpose
Automatic Scaling	Adjusts resources based on workload demand
Self-Healing	Restarts crashed containers and reschedules failed workloads
Load Balancing	Distributes traffic evenly across running containers
Automated Deployment & Rollbacks	Ensures smooth version updates without downtime
Storage Orchestration	Integrates with local and cloud storage solutions
Service Discovery	Automatically assigns network addresses to services

Benefits of Kubernetes:

- High Availability and Fault Tolerance
- Optimized Resource Utilization
- Support for Hybrid and Multi-Cloud Deployment
- Automation of DevOps workflows
- Faster and reliable software releases

Applications and Use Cases:

Industry	Example Use
Finance	High-performance digital banking apps and fraud detection engines
E-Commerce	Scalable online platforms handling fluctuating demand
Telecom	Network functions virtualization (NFV) and 5G services
Healthcare	Secure infrastructure for patient data and AI analytics
AI/ML	Dataset processing and model deployment pipelines

Challenges in Kubernetes Adoption:

- Requires steep learning curve, Complex setup for beginners.
- Continuous monitoring and security hardening needed.
- Requires integration with CI/CD and DevOps culture

Conclusion:

Kubernetes and containerization represent a major evolution in software deployment and infrastructure management. By enabling portability, automation, and scalability, these technologies support the growing need for cloud-native, resilient, and high-performance applications. As organizations worldwide adopt DevOps and microservices architectures, Kubernetes continues to be a cornerstone for modern digital transformation.

Mr. S. Manohar (22R11A05T6)
III Year

Overview of AWS, Azure and Google Cloud

AWS, Azure, and Google Cloud are the three most used cloud platforms.

What is AWS?

Amazon Web Services (AWS) was the first cloud computing platform launched in 2006. It is the market pioneer and leader in cloud computing with a global network of data centers that offer IaaS (Infrastructure as a platform), SaaS (Software as a Service), and PaaS (Platform as a Service) solutions.

Some of its key services are:

- Compute – Amazon EC2, AWS Lambda, AWS Fargate
- Storage – Amazon S3, Amazon EBS, AWS Backup
- Databases and data management – Amazon RDS, DynamoDB, Amazon Redshift, AWS Glue
- Networking and content delivery – Amazon VPC, AWS Direct Connect, Amazon CloudFront
- Monitoring and security – AWS CloudTrail, AWS IAM, AWS WAF, AWS Shield
- Artificial intelligence and machine learning – Amazon SageMaker, AWS Lex, AWS Rekognition
- Migration and hybrid cloud – AWS Snowball, AWS Migration Hub, AWS Outposts
- Development and DevOps – AWS CodePipeline, AWS CodeDeploy, AWS CloudFormation
- Application services – AWS Step Functions, AWS App Runner, AWS Elastic Beanstalk
- Mobile and edge computing – AWS AppSync, AWS Wavelength, AWS IoT Core
- AWS offers hundreds of services, but these categories highlight some of its most widely used solutions.

What is Microsoft Azure?

Microsoft Azure, formerly known as Windows Azure, was publicly available in 2010 and is widely used by businesses to host applications, data analytics, IoT, and machine learning. It's particularly strong in enterprise computing and appeals to companies already using Microsoft technologies.

Some of its key services are:

- **Compute** – Azure Virtual Machines, Azure Kubernetes Service (AKS), Azure Functions
- **Networking** – Azure Virtual Network, Azure Load Balancer, Azure ExpressRoute
- **Storage and databases** – Azure Blob Storage, Azure Files, Azure Cosmos DB, Azure SQL DB.
- **Artificial intelligence and machine learning** – Azure Machine Learning, Azure Cognitive Services, Azure Bot Services
- **IoT and edge computing** – Azure IoT Hub, Azure Sphere, Azure Edge Zones
- **Security and identity management** – Azure Active Directory (AD), Microsoft Defender for Cloud, Azure Key Vault
- **Monitoring and management** – Azure Monitor, Azure Security Center, Azure Automation
- **Developer tools and DevOps** – Azure DevOps, Azure Logic Apps, Azure API Management
- **Hybrid and multi-cloud** – Azure Arc, Azure Stack, Azure Site Recovery.

What is Google Cloud Platform?

Google Cloud Platform (GCP) is Google's suite of cloud computing services, launched in 2008. GCP offers the same infrastructure that Google uses for its own products, such as Gmail and YouTube, which makes it particularly attractive to companies focusing on big data and AI applications.

Overview of AWS, Azure and Google Cloud

Some of the Google Cloud key services are:

- **Compute** – Google Compute Engine (GCE), Google App Engine (GAE), Google Cloud Run
- · **Containers and Kubernetes** – Google Kubernetes Engine (GKE), Anthos, Cloud Run
- · **Storage and databases** – Google Cloud Storage, Cloud SQL, Bigtable, Firestore
- · **Networking and content delivery** – Google Virtual Private Cloud (VPC), Cloud CDN, Cloud Interconnect
- · **Big data and analytics** – BigQuery, Dataflow, Dataproc, Pub/Sub
- · **Artificial intelligence and machine learning** – Vertex AI, AutoML, TensorFlow Enterprise
- · **Monitoring and security** – Google Cloud Operations Suite, Security Command Center, Identity-Aware Proxy
- · **IoT and edge computing** – Cloud IoT Core, Edge TPU, Cloud Functions
- · **Developer tools and DevOps** – Cloud Build, Artifact Registry, Firebase, Cloud APIs
- **Hybrid and multi-cloud** – Google Anthos, Migrate for Compute Engine, Bare Metal Solution.

Difference between GCP vs Microsoft Azure vs AWS

Subject	Google Cloud Platform (GCP)	Microsoft Azure	Amazon Web Services (AWS)
Launched	2008	2010	2006
Storage Domain	Cloud Storage	Blocked storage	S3
Monitoring	Stack driver monitoring services	Azure Application Insight	Cloud watch
Block Storage	Persistent disk	Page blobs	EBS
Cloud Services (Protection)	Shield	DDos	Cloud Armor
Market Share	9%	22%	33%
DNS Service	Cloud DNS	Azure traffic manager	Amazon Route 53
Automation	Compute Engine Management	Azure Automation	AWS Opsworks
Location	22 Regions (61 zones)	60+ Regions	26 Regions
Security	Cloud security Command Centre	Azure Security Centre	AWS Security Hub

Mr. G. BHARGAVA RAM
(23R11A05F1)
II Year

The Tech Student's Journey Poem

In the quiet hum of a lab late at night,
A technical student begins their fight
Not against people, but problems unseen,
Turning complex ideas into a meaningful scene.

Lines of code dance across the screen,
Logic unfolds—structured and clean.
Every bug fixed, every function aligned,
Builds confidence, skill, and a sharper mind.

Artificial Intelligence steps into view,
Teaching machines to think like humans do.
From recognizing faces to predicting trends,
AI ensures innovation never ends.
It learns, it adapts, it reasons with grace
A revolution reshaping every space.

Then comes Machine Learning, the teacher within,
Where patterns from data help systems begin.
Supervised, unsupervised, reinforcement too
ML builds solutions that constantly improve.
Models trained, errors reduced,
Complex predictions easily produced.

Deep Learning dives deeper with neural might,
Layer by layer, it learns to get things right.
Inspired by neurons inside the brain,
It solves what once drove researchers insane.
Speech, images, language untangled
Through DL networks elegantly angled.

Above them all, the Cloud stands high,
A digital universe beyond the sky.
No servers to carry, no storage to fear-
Compute, deploy, scale-instantly here.
From virtual machines to AI on demand,
Cloud computing strengthens every hand.

For technology is not just wires and code,
But curiosity, passion, and the road.
To build solutions that change how we live-
Tools that think, systems that give.
So here's to the students who dream and create,
Who push boundaries and never hesitate.
With AI, ML, DL, and Cloud as their guide
The future is theirs limitless, amplified.

Mr. S.DHEERAJ
(23R11A05H9)
II Year

Technology Themed Poems

DEBUGGING DIARIES

Today I wrote code I believed was great,
But the compiler disagreed and made me wait.
Errors appeared I never expected,
My logic broke completely disconnected.

I fixed one bug and smiled with pride,
But three more showed up right beside.
Stack Overflow became my second home,
While my laptop fan sounded like a drone.

Still, with patience, coffee, and endless tries,
I watch the bugs fall one by one before my eyes.
Because every programmer eventually sees-
Debugging isn't pain… it's a core degree requirement.

Tech Trouble Tales

My laptop started updating right before class,
Windows said: "Just 2 minutes!"…and an hour passed.
My code ran perfectly at least in my head,
But the terminal returned errors instead.

AI predicts the future and drives a car,
But I can't even format text without falling apart.
Machine Learning improves itself day by day,
While I forget passwords in every possible way.

Deep Learning has layers, neurons, and flair,
Meanwhile I'm staring at code thinking:
"Why is this not fair?"

Yet through chaos, confusion, and countless retries,
Tech students evolve—just like algorithms rise.
Because no matter the bugs, the crashes, the load,
We survive… with coffee, memes, and late-night code.

Ms. DASARI ADVIKA
(23R11A0515)
II Year

Student Committee for Newsletter "TechEpistle"

S.No.	Roll Number	Student Name	Year
1	21R11A0595	Ms. POTHARLA BABY SHIVA NAGA SRIYA	IV Year
2	22R15A0508	Mr. GUDIKATI ASHOK	IV Year
3	21R11A0559	Mr. AVVARU GURU JAYANTH	IV Year
4	21R11A05J7	Mr. PALLE ANUROOP REDDY	IV Year
5	21R11A05D2	Ms. MANDADI HARSHITHA REDDY	IV Year
6	21R11A05K0	Mr. RAMIDI HARINATH REDDY	IV Year
7	22R11A0586	Mr. S.VENKATA PAVAN KARTHIK	III Year
8	22R11A0587	Mr. SUGUNESH SAI KISHORE	III Year
9	22R11A0529	Mr. NALLAPATI NIKHIL SAI	III Year
10	22R11A0522	Ms. KONREDDY HIMASRI	III Year
11	22R11A0547	Mr. AMIT BADONI	III Year
12	22R11A05U6	Ms. VISHWANATH SAI SHRIYA	III Year
13	22R11A05T6	Mr. SANTHOSAM MANOHAR	III Year
14	22R11A05X9	Ms. RELANGI TARUN KUMAR	III Year
15	22R11A05Y7	Ms. VANAGAROUTHU SAI SHARANYA	III Year
16	22R11A0524	Ms. MALIGE SUMANA SRI	III Year
17	23R11A0501	AKSHAD MISHRA	II Year
18	23R11A0523	KANKATALA SAI SRAVANTHI	II Year
19	23R11A05M1	P ANANYA	II Year
20	23R11A0524	KEERTI TEJA SRI CHARAN	II Year