



# K.S. INSTITUTE OF TECHNOLOGY BANGALORE-109

## ANNUAL REPORT 2024-25

### DEPARTMENT OF COMPUTER SCIENCE & DESIGN ENGINEERING

#### EVENTS CONDUCTED

- 1) Department of Computer Science and Design organized one day workshop on “IBM Skill Build On Insights into AI” on 12<sup>th</sup> September 2024 by Mr Shrikant Nivarthi Founder And CEO from TurnIn Learning Solutions Private LTD and Mr. Raghuraj Sing Training and Software development, AV College, Hyderabad.



- 2) Department of Computer Science and Design organized one day Industrial Visit “U R Rao Satellite Centre” on 13<sup>th</sup> September 2024 under ADROIT Club.



- 3) Department of Computer Science and Design organized one day Industrial Visit for 5<sup>th</sup> sem students to Xcel Corp, Bangalore under ADROIT Club on 27<sup>th</sup> September 2024.





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- 4) Department of Computer Science and Design organized “Code Kala” under Adroit club on 21<sup>st</sup> November 2024.



- 5) Department of Computer Science and Design organized Technical Talk on “Full Stack Development” by Nikita M VP of Web Applications at WishTales AI on Saturday 23<sup>rd</sup> November 2024 by ADROIT Club.



- 6) Department of Computer Science and Design organized one day workshop on “Mern Stack” by Resource Person Dr. Geetha J Associate Professor in Computer Science Department, MSRIT on 27<sup>th</sup> November 2024.





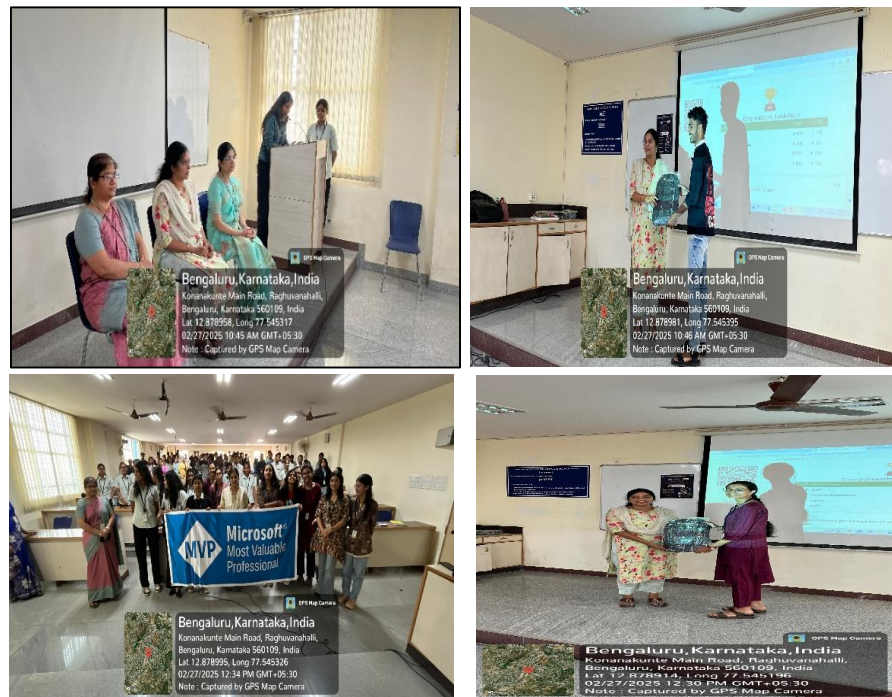
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- 7) The Department of Computer Science and Design organized a technical talk on “Animation, Visual Effects, Gaming & Comics” by **Mr. Prabhanjana Rao**, Founder and CEO of **Galore Systems** on 24<sup>th</sup> February 2025.



- 8) The Department of Computer Science and Design organized a technical talk on “AI Powered Decisions: Turning Data Into Actions” by **Mr. Poornima S**, Next Gen Coach on 27<sup>th</sup> February 2025.



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- 9) The Department of Computer Science and Design organized a technical talk on “*Design Thinking, Critical Thinking and Innovation Design*” by the resource person **Mr. Dhiraj Abhumanyu Rao**, Managing Director and Partner of **AANS Technologies**, on 28<sup>th</sup> February 2025.



- 10) **Industrial Visit:** The students visited **Microsoft Corporation – Microsoft India (R&D) Pvt. Ltd.**, on 25<sup>th</sup> March 2025, where they gained insights into research and development, Azure cloud services, and cutting-edge technologies such as AI.





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- 11) The Department of Computer Science and Design organized a workshop on “Full Stack Development” by Ms. Nikitha M, Founding Vice President of Wishtales AI, on 29<sup>th</sup> March 2025.



**EVENTS ATTENDED BY FACULTY**

- 1) Dr. Deepa S.R attended the FDP on “Artificial Intelligence” held from 4th September 2024 to 4th October 2024, organized by AICTE and SkillDzire through SWAYAM Plus platform
- 2) Mrs. Sathya Sheela attended the FDP on “Research Methodology” held from 13th to 15th October 2024, organized by Indian Institute of Academic and Research Advancement (IIRA), Ministry of MSME, Mumbai.
- 3) Mrs. Roopa K Murthy attended the FDP on “Cyber Security using AI” held from 10th February to 15th February 2025, organized by JAIN University in association with E&ICT Academy, IIT Kanpur.
- 4) Dr. Deepa S.R Attended the MongoDB Academic Summit -2024, on 10<sup>th</sup> September 2024
- 5) Mrs Sathya Sheela attended three days Faculty Development Program on Research Methodology from 13<sup>th</sup> to 15<sup>th</sup> OCT 2024.Organized by Indian Institute Of Academic and Research Advancement (IIRA) Ministry Of MSME,Mumbai.
- 6) Dr. Deepa S R attended the FDP titled “Deep Learning and Gen AI Applications”, organized by E&ICT Academy, IIT Roorkee in collaboration with B.N.M Institute of Technology (BNMIT), Bengaluru, held from 20th January 2025 to 25th January 2025.
- 7) Dr. Surekha Byakod attended the FDP titled “Deep Learning and Gen AI Applications”, organized by E&ICT Academy, IIT Roorkee in collaboration with B.N.M Institute of Technology (BNMIT), Bengaluru, held from 20th January 2025 to 25th January 2025.



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- 8) Mrs. Ammu Bhuvana D attended the FDP titled “Deep Learning and Gen AI Applications”, organized by E&ICT Academy, IIT Roorkee in collaboration with B.N.M Institute of Technology (BNMIT), Bengaluru, held from 20th January 2025 to 25th January 2025.
- 9) Mrs. Sathya Sheela D attended the FDP titled “Deep Learning and Gen AI Applications”, organized by E&ICT Academy, IIT Roorkee in collaboration with B.N.M Institute of Technology (BNMIT), Bengaluru, held from 20th January 2025 to 25th January 2025.
- 10) Mrs. Sushma A attended the FDP titled “Deep Learning and Gen AI Applications”, organized by E&ICT Academy, IIT Roorkee in collaboration with B.N.M Institute of Technology (BNMIT), Bengaluru, held from 20th January 2025 to 25th January 2025.
- 11) Mrs. Roopa K attended the FDP titled “Deep Learning and Gen AI Applications”, organized by E&ICT Academy, IIT Roorkee in collaboration with B.N.M Institute of Technology (BNMIT), Bengaluru, held from 20th January 2025 to 25th January 2025.
- 12) Mrs. Wasim Yasin attended the FDP titled “Deep Learning and Gen AI Applications”, organized by E&ICT Academy, IIT Roorkee in collaboration with B.N.M Institute of Technology (BNMIT), Bengaluru, held from 20th January 2025 to 25th January 2025.
- 13) Mrs. Sathya Sheela D attended the FDP titled “Gen AI and ChatGPT Application in Industry”, organized by SJC Institute of Technology, held from 27th January 2025 to 31st January 2025.
- 14) Dr. Surekha Byakod and Sathya Sheela D attended the FDP titled “Internet of Things (IoT)”, organized by SkillDzire in collaboration with AICTE, conducted through SWAYAM Plus platform (Online mode), held from 17th March 2025 to 31st March 2025.
- 15) Mrs. Sathya Sheela D attended the FDP titled “Effective Research Paper Writing: Tools and Techniques”, organized by City Engineering College, Bengaluru, held from 20th March 2025 to 22nd March 2025.
- 16) Mrs. Sathya Sheela D attended the FDP titled “Emerging Technologies – Shaping the Future”, organized by Bangalore Institute of Technology, held from 12th May 2025 to 16th May 2025.
- 17) Mrs. Sathya Sheela D attended the FDP titled “Internet of Things (IoT) and its Application in AWS”, organized by CMR Technical Campus, held from 19th May 2025 to 24th May 2025.
- 18) Mrs. Ammu Bhuvana D attended the One Week FDP on “Parallel Computing”, organized by E&ICT Academy, IIT Guwahati, held from 23rd June 2025 to 27th June 2025, in association with RV Institute of Technology and Management, Bengaluru.



**PUBLICATIONS BY FACULTY:**

- 1) Dr. Deepa S R, Professor & Head ,CSD Dept. published a paper entitled “Real Time Snake Detection and Alert System in Agriculture Fields Using Computer Vision and IoT” in the International Conference on Recent Innovations in Engineering Science & Technology (ICRIET-2025) proceedings titled “Engineering Science and Technology Innovations for the Future”, published by CRC Press, Taylor & Francis Group, London, ISBN: 978-81-929425-7-5, in the year 2025.
- 2) Dr. Deepa S R Professor & Head ,CSD Dept. published a paper entitled “Smart Farming Using Machine Learning: A Concise Review” in IJCRT (International Journal of Creative Research Thoughts), ISSN: 2320-2882, Vol. 13, Issue 7, pp. 989–995, URL: <http://www.ijcrt.org/IJCRTBE02127> , in the year 2025.
- 3) Dr. Deepa S.R, Professor & Head, CSD Dept. published a paper entitled “College Management System” in the International Journal of Research Publications and Reviews, Volume 6, Issue 2, categorized as Peer Reviewed Journal.
- 4) Dr. Deepa S.R, Professor & Head, CSD Dept., published a paper entitled “Breast Cancer Prediction using Genetic Algorithm and Sand Cat Swarm Optimization Algorithm” in the Indonesian Journal of Electrical Engineering and Computer Science, Volume 37, Issue 2, ISSN: 2502-4752, categorized as Peer Reviewed Journal.
- 5) Mrs.Sushma A and Dr. Deepa S R published a paper entitled “Enhancing Cyberbullying Detection with Geo-Aware Transformers and Deep Learning: A Comprehensive Survey” in the International Conference on Recent Innovations in Engineering Science & Technology (ICRIET-2025) proceedings titled “Engineering Science and Technology Innovations for the Future”, ISBN: 978-81-929425-7-5, and also published in IJCRT (International Journal of Creative Research Thoughts), ISSN: 2320-2882, Vol. 13, Issue 7, pp. 979–988, URL: <http://www.ijcrt.org/IJCRTBE02126> , in the year 2025.
- 6) Dr. Surekha Byakod Associate Professor, CSD Dept., published a paper entitled “Smart IoT-Enabled Vending Machine for Medical and Sanitary Supplies” in the International Conference on Recent Innovations in Engineering Science & Technology (ICRIET-2025) proceedings titled “Engineering Science and Technology Innovations for the Future”, published by CRC Press, Taylor & Francis Group, London, ISBN: 978-81-929425-7-5, ISBN: 9781003685876, DOI: 10.1201/9781003685876, in the year 2025.
- 7) Dr. Surekha Byakod, Associate Professor, CSD Dept., published a paper entitled “ENNP: A Logical Strategy to Design an Improved Medical Image Segmentation Process using Elevated Neural Network Principle” in the Proceedings of the 2024 8th International Conference on I-SMAC (IoT in Social, Mobile, Analytics and Cloud) (I-SMAC 2024), ISBN: 979-8-3503-7642-5, indexed in IEEE Xplore.



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- 8) Mrs. Sathya Sheela D, Asst. Professor, CSD Dept., published a paper entitled “ReBottle Rewards: An IoT-Integrated System for Incentivized Plastic Waste Management” in the International Conference on Recent Innovations in Engineering Science & Technology (ICRIET-2025) proceedings titled “Engineering Science and Technology Innovations for the Future”, published by CRC Press, Taylor & Francis Group, London, ISBN: 978-81-929425-7-5, in the year 2025.
- 9) Mrs. Ammu Bhuvana D, Asst. Professor, CSD Dept., published paper on “Medical Image Analysis for lung cancer using AI”, IJCRT, April 2025
- 10) Mrs. Ammu Bhuvana D, Asst. Professor, CSD Dept., published paper on “Vehicle Traffic Statistics in Real World Urban Environments”, IJIRCCE, February 2025
- 11) Mrs. Sushma A, Asst. Professor, CSD Dept., published a paper entitled “Finance Tracker” in the International Journal of Research Publications and Reviews, Volume 6, Issue 2, categorized as Peer Reviewed Journal.

**PATENTS BY FACULTY**

- 1) Mrs. Sathya Sheela D filed a patent titled “Water Quality Predication for Smart Mariculture” on 21/09/2024 (Patent No: 202441071455) – Published.
- 2) Dr. Surekha Byakod filed a patent titled “IoT-based Device for Detecting Diseased Leaves in Plants using Image Processing” on 01/02/2025 (Patent No: 446355-001) – Published.
- 3) Mrs. Mamatha C filed a patent titled “Artificial Intelligence Based Battery Cooling System” on 04/02/2025 (Patent No: 446705-001) – Published.

**ACHIEVEMENTS BY FACULTY**

- 1) Dr. Deepa S R appointed as a Member of the Board of Examiners (BOE) for the CS/IS Board at VTU during the academic year 2024–2025.
- 2) Dr. Deepa S R appointed as an External Examiner for the Board of Examiners (BOE) at DSATM, Bangalore during the academic year 2024–2025.
- 3) Dr. Deepa S R has been a Session Chair for IEEE International conference on Data Engineering and Communication systems at RNSIT, Bangalore held during March 2024.
- 4) Dr Surekha Byakod has reviewed the papers for IEEE International Conference on networks multimedia and information Technology is organized by NITTE Meenakshi Institute Of Technology, Bangalore on 9<sup>th</sup> and 10<sup>th</sup> Aug 2024.
- 5) Dr Surekha Byakod is is appreciated for organizing and coordinating students to industrial visit for on 27-Sep-2024.EXCEL Corp USA.
- 6) Mrs. Ammu Bhuvana D successfully completed the Innovation Ambassador (IA) Training – Foundation Level, conducted in online mode by MoE’s Innovation Cell & AICTE during the IIC calendar year 2024–25
- 7) Mrs. Ammu Bhuvana D successfully completed the Innovation Ambassador (IA) Training – Advanced Level, conducted in online mode by MoE’s Innovation Cell & AICTE during the IIC calendar year 2024–25



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- 8) Mrs. Ammu Bhuvana D successfully completed the Innovation Ambassador (IA) Training – Reskilling (Total 21 Sessions / 21 Contact Hours), conducted in online mode by MoE’s Innovation Cell & AICTE during the IIC calendar year 2024–25
- 9) Mrs Sushma A is appreciated for organizing and coordinating students to industrial visit for on 27-Sep-2024.EXCEL Corp USA.
- 10) Mrs Sathya Sheela D is is appreciated for organizing and coordinating students to industrial visit on 27-Sep-2024.EXCEL Corp USA.

**PUBLICATIONS BY STUDENTS**

- 1) Vaishnavi S, A S N Sreeya, Savya Shree S, and Deepthi G B published a paper entitled “Smart Urban Helmet Rental System with IoT Integration and Mobile Centric User Interface” in the International Journal for Multidisciplinary Research (IJFMR), Volume 7, Issue 3, May–June 2025, E-ISSN: 2582-2160.
- 2) K S Nandish, Neha M R, Riya Nair, and Mayurganapati S Badgeri published a paper entitled “SmartRoute: Academic Data Management and AI-Driven Career Assistance System with Resume Building” in the International Research Journal of Modernization in Engineering Technology and Science, Volume 07, Issue 04, April 2025, e-ISSN: 2582-5208.
- 3) Shivani Adhikari, Arun A, Vidheesha T M, and Chandrasekar A published a paper entitled “Smart Agriculture System for Precision Farming” in the International Research Journal of Modernization in Engineering Technology and Science, Volume 07, Issue 04, April 2025, e-ISSN: 2582-5208.
- 4) Dhanush B K, Kusum Pakira, and Purushotham V Mitti published a paper entitled “Medico: Specialized Medicine Guidance and Blood Bank Assistance” in the International Research Journal of Modernization in Engineering Technology and Science, Volume 07, Issue 04, April 2025, e-ISSN: 2582-5208.
- 5) Sanjay P, Shreyas M, Sudarshan Babu A, and Tarun Jangir published a paper entitled “Behavioral Threat Detection of Ransomware using LSTM Architecture” in the International Research Journal of Modernization in Engineering Technology and Science, Volume 07, Issue 04, April 2025, e-ISSN: 2582-5208.
- 6) B H Ruchira, Badari Prasad M, G Pradeep, and Govind V Shetty published a paper entitled “I-SENSEI.AI – A Mock Interview Platform” in the International Research Journal of Modernization in Engineering Technology and Science, Volume 07, Issue 04, April 2025, e-ISSN: 2582-5208.
- 7) Hemanth M, Shalini B, Thejas B S, and Varshitha S published a paper entitled “Early Age Heart Disease Prediction” in the International Research Journal of Modernization in Engineering Technology and Science, Volume 07, Issue 05, May 2025, e-ISSN: 2582-5208.



- 8) Deepika S, Keerthana S D, Sanjana Sreenivas, and Sumana R published a paper entitled “Image Processing based Arecanut Diseases Detection Using CNN Model” in the International Journal for Scientific Research in Engineering and Management, Volume 09, Issue 05, May 2025, e-ISSN: 2582-3930.
- 9) Karthik C S, R Sai Prakash, Shruti K Raj, and Sumanth V Shet published a paper entitled “Monitoring Toxic Gases using ML Model” in the International Research Journal of Modernization in Engineering Technology and Science, Volume 07, Issue 04, April 2025, e-ISSN: 2582-5208.
- 10) Kushal M J, Preetham H V, Shreyas G, and Sharath N published a paper entitled “Centralized Health Access & Donation Network” in the International Research Journal of Modernization in Engineering Technology and Science, Volume 07, Issue 05, May 2025, e-ISSN: 2582-5208.
- 11) Keerthana S, Keerthana L, Prateek C H, and Vyshnavi S N published a paper entitled “Detection of DDOS using AI” in the International Advanced Research Journal in Science, Engineering and Technology, Volume 12, Issue 05, May 2025, ISSN (Online): 2393-8021, ISSN (Print): 2394-1588.
- 12) Bharath R, Giri Shankar, Shruthi M, and Sushil Waghmare published a paper entitled “Virtual Interaction System using OpenCV” in the International Advanced Research Journal in Science, Engineering and Technology, Volume 12, Issue 05, May 2025, ISSN (Online): 2393-8021, ISSN (Print): 2394-1588.
- 13) Nishanth G K, Puttur Praveen Kumar, Arpitha G R, and G Yogiram published a paper entitled “College Management System” in the International Journal of Research Publication and Reviews (IJRPR), Volume 6, Issue 2, published on 17th February 2025, ISSN: 2582-7421.
- 14) Abdus Salaam I, Danda Ajith Kumar, Shishira M, and Thanuja B published a paper entitled “Finance Tracker” in the International Journal of Research Publication and Reviews (IJRPR), Volume 6, Issue 2, published on 24th February 2025, ISSN: 2582-7421.

#### **ACHIEVEMENTS BY STUDENTS**

- 1) Pavithraa G, Department of CSD, secured Bronze medal in the 62nd National Roller Skating Championship (inline hockey) 2024 - held at Coimbatore from 5th to 15th December 2024
- 2) Anvith C D, Akash C, Guddesh H Patil, and R Pratham Rao Herur, Department of CSD, secured Runner-Up in the Hackathon – NAVOTTHANA, held at JSS Academy of Technology, Bengaluru from 6th to 7th March 2025, under the guidance of Roopa K.
- 3) Jagannath Nayak, Department of CSD, secured Top 16 position out of 110 teams in the 24 Hours Hackathon – ANVESHANA, held at Akshaya Institute of Technology, Tumkur on 26th March 2025, under the guidance of Mamatha C.



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- 4) Ankitha Devlokam, Vignesh U, Challa Deepika, and Sahithi, Department of CSD, won the Best Paper Award for the paper titled “Smart IoT-Enabled Vending Machine for Medical and Sanitary Supplies” in the International Conference on Recent Innovations in Engineering Science & Technology (ICRIET-2025) held on 9th and 10th May 2025, under the guidance of Dr. Surekha Byakod.
- 5) Divya T, Sanjana V, and Sathya Sai Sri B S, Department of CSD, won the Best Paper Award for the paper titled “ReBottle Rewards: An IoT-Integrated System for Incentivized Plastic Waste Management” in the International Conference on Recent Innovations in Engineering Science & Technology (ICRIET-2025) held on 9th and 10th May 2025, under the guidance of Sathya Sheela D.
- 6) Pruthvi Herle, Department of CSD, won the Best Idea Award in FLO-/LINK/AI-Powered Menstrual Care Hub, IEEE CEDA IDEATHON 2025, held at VTU, Belgaum on 23rd August 2025, under the guidance of Ammu Bhuvana D.
- 7) Akshay R, Department of CSD, participated in the Eureka! Pitching Competition held on 25th August 2025, under the guidance of Diana.

**VTU RANK HOLDERS**

SL No	USN NO	STUDENT NAME	RANK	
1	1KS21CG004	ANAGHA SHASTRY	1 <sup>st</sup> Rank	 <p>Anagha Shastry 1KS21CG004</p>
2	1KS21CG055	VARSHITHS SRIDHAR	2 <sup>nd</sup> Rank	
3	1KS21CG053	VAISHNAVI A	3 <sup>rd</sup> Rank	 <p>Vaishnavi S 1KS21CG053</p>
5	1KS21CG038	SATHYA SAI SRI B S	7 <sup>th</sup> Rank	 <p>Sathya Sai Sri B S 1KS21CG038</p>
6	1KS21CG044	SHREYAS M	8 <sup>th</sup> Rank	



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### TOPPER'S LIST 2024-25

SL. NO	USN NO	STUDENTS NAME
<b>1<sup>st</sup> Year Toppers List</b>		
1	1KS24CG022	HARSHITHA UMASHANKAR
2	1KS24CG047	SHREYA C S
3	1KS24CG004	ANANYA R
<b>2<sup>nd</sup> Year Toppers List</b>		
1	1KS23CG003	ANANYA SUDARSHAN
2	1KS23CG017	HARSHITHA M
3	1KS23CG044	RAMYA K
<b>3<sup>rd</sup> Year Toppers List</b>		
1	1KS22CG051	SRUSHTI
2	1KS22CG049	SRINIDHI N
3	1KS22CG043	SHASHANK.M
<b>4<sup>th</sup> Year Toppers List</b>		
1	1KS21CG004	ANAGHA SHASTRY
2	1KS21CG055	VARSHITHA SRIDHAR
3	1KS21CG016	DIVYA T



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### 100% RESULTS

Sl. No	Subject Code	Subject	Faculty
1	21CD744	Big Data Analytics	Dr. Deepa S R
2	21CS72	Cloud Computing	Prof. Sathya Sheela D
3	21IS733	Used Interface Design	Prof. Ammu Bhuvana D
4	BCG515D	Designing Human Centred System	Prof. Ammu Bhuvana D
5	21RM56	Research Methodology & Intellectual Property Rights	Dr.Surekha Byakod
6	21CD641	Design Of IOT Design	Prof. Ammu Bhuvana D