

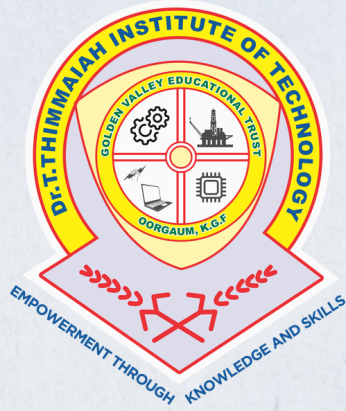
DEPARTMENT OF
COMPUTER SCIENCE AND ENGINEERING

TECH SPIRE

MAGAZINE

2025 - 2026





DR.T.THIMMAIAH INSTITUTE OF TECHNOLOGY

DEPARTMENT OF
COMPUTER SCIENCE AND ENGINEERING

TECH SPIRE

2025-2026

IGNITE THE SPARK OF
CREATIVITY IN EVERY MIND

AN ENDURING LEGACY



**Late Dr. T. Thimmaiah, Ph.D (London),
FOUNDER**

The Department of Computer Science and Engineering takes immense pride in dedicating this TECH SPIRE Magazine to our esteemed founder, late Dr. T. Thimmaiah, Ph.D (London), IAS (Retired), the Founder under the aegis of the Golden Valley Educational Trust. A distinguished administrator and visionary educationist, late Dr. T. Thimmaiah established this institution with the noble objective of imparting quality technical education and creating meaningful opportunities for students to excel academically and professionally. With remarkable determination and foresight, he transformed what once seemed impossible into possible by bringing quality higher education to a rural region. When access to higher education and modern infrastructure was limited, his vision laid the foundation for an institution that would bridge the gap between rural aspirations and global standards of learning, becoming a cornerstone for educational growth in the region.

Recognizing the importance of technology in shaping the future, Dr. T. Thimmaiah, the Founder established the Department of Computer Science and Engineering in the academic year 1988 with a vision of innovation and academic excellence.

Over the years, the Department of Computer Science and Engineering has grown as a vibrant center for learning, research, and technological advancement. It continues to integrate modern technology with strong academic values and professional ethics. The achievements of the department reflect the enduring vision and dedication of our founder. Through this TECH SPIRE Magazine, we express our deep respect and sincere gratitude to late Dr. T. Thimmaiah for his visionary leadership and lasting contribution to education.

Leadership Perspectives



Dr. T. Venkat Vardhan
President, GVET

I extend my warm greetings to TECH SPIRE, the Departmental magazine of Computer Science and Engineering at Dr. T. Thimmaiah Institute of Technology. As President of the institution, I take great pride in seeing the magazine highlight students achievements in academics, research, publications, technological innovation, sports, and cultural activities, helping shape well-rounded individuals. I appreciate the efforts of Dr. Geetha C. Megharaj, the Head of the Department, faculty members, editorial team, and students in creating this inspiring platform for sharing knowledge, ideas, and innovations.

I wish TECH SPIRE continued success in encouraging young minds toward excellence, novel thinking, and meaningful contributions to society.



Mr. Raoul Kengal Vardhan
Vice President, GVET

As Vice President, I am delighted to see TECH SPIRE showcasing the innovative spirit of the Department of Computer Science and Engineering while highlighting students achievements in academics, research, publications, sports, and cultural activities. I sincerely appreciate the dedicated efforts of the faculty members and the editorial team in making this inspiring initiative possible. I wish TECH SPIRE continued success in motivating young minds toward innovation, technological progress, creative ideas, and meaningful contributions to society.



Mr. Rohahn Vardhan
Vice President, GVET

I am pleased to see the Department of Computer Science and Engineering bringing out TECH SPIRE, a platform that reflects innovation, creativity, and achievements in academics, research, publications, sports, and cultural activities. I appreciate the dedication of the faculty, editorial team, and students in making this publication possible. I wish TECH SPIRE continued success in inspiring students to explore new technologies, develop novel ideas, and contribute meaningfully to the field of computer science and society.

Contents

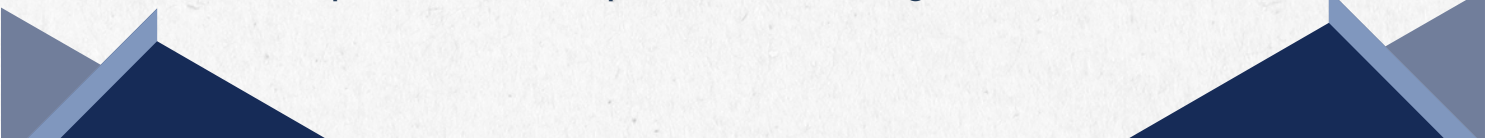
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TECH SPIRE

TECH SPIRE is the student-led technical magazine of the Department of Computer Science and Engineering at Dr. T. Thimmaiah Institute of Technology, Kolar Gold Fields. The fourth issue of **TECH SPIRE** stands as a testament to the department's commitment to academic excellence, innovation, and holistic student development, bringing together the collective efforts of students, faculty, and academic leaders.

This edition captures a wide spectrum of departmental activities and achievements, featuring messages from the Principal, Vice Principal, Dean Academics, and Head of the Department, each emphasizing the importance of continuous learning, research orientation, ethical responsibility, and industry relevance in the field of Computer Science and Engineering. The magazine reflects the department's vision and mission of nurturing technically competent, innovative, and socially responsible professionals.

TECH SPIRE highlights notable student accomplishments, including honours degree recipients, university rank holders, intercollege competition winners, and award-winning project teams. It also showcases student creativity beyond academics through published novels and poetry, demonstrating the department's encouragement of diverse talents. The magazine further documents departmental competitions, technical events, workshops, and sessions focused on innovation, startups, research writing, and entrepreneurship, providing students with platforms for experiential learning and skill enhancement.



DEPARTMENT VISION AND MISSION

VISION

“To produce highly competent and innovative Computer Science professionals through excellence in teaching, training and research.”

MISSION

- To provide appropriate infrastructure to impart need-based technical education through effective teaching and research
- To involve the students in innovative projects on emerging technologies to fulfill the industrial requirements.
- To render leadership skills and ethical responsibilities in students that leads them to become globally competent professionals.

MESSAGES



Dr. Syed Arif
Principal

As the Principal of the college, it is my privilege to present "TECH SPIRE", our student-led technical magazine. This publication stands as a testimony to our unwavering commitment to academic excellence, innovation, and holistic development.

Over the past year, our students and faculty have demonstrated remarkable dedication through technical achievements, research initiatives, and vibrant departmental activities. Each contribution featured in this magazine reflects the dynamic spirit and collective effort of our academic community. As you explore these pages, I encourage you to appreciate the knowledge, creativity, and accomplishments showcased within. It is through continuous learning, collaboration, and responsible innovation that we shape a brighter and more sustainable future.



Dr. H. G. Shenoy
Vice Principal

As the Vice Principal of the college, I am delighted to welcome you to "TECH SPIRE", a student-led technical magazine that showcases the creativity and innovation of our Computer Science and Engineering students. This publication reflects the enthusiasm and technical excellence of young minds who strive to explore emerging technologies beyond the classroom. Such initiatives play an important role in nurturing leadership, teamwork, and practical learning experiences.

I sincerely appreciate the efforts of the editorial team, faculty advisors, and contributors who have worked together to bring out this issue successfully. I am confident that this edition will inspire readers to pursue knowledge, innovation, and professional excellence.



Ruckmani Divakaran
Dean - Academics

As the Dean of the institution, it is my pleasure to present "TECH SPIRE", highlighting the academic excellence and innovative spirit of the Department of Computer Science and Engineering. This magazine reflects the department's strong emphasis on research, outcome-based education, and industry-relevant learning. Such initiatives encourage students to bridge the gap between theoretical concepts and practical applications.

I appreciate the dedicated efforts of the faculty, editorial team, and contributors in bringing out this valuable publication. I am confident that this edition will promote continuous learning, intellectual growth, and professional excellence among our students.

CHIEF EDITOR & HOD



Dr. Geeiha C Megharaj
Head, Department of Computer Science and
Engineering

As the Head of the Department of Computer Science and Engineering, it gives me immense pleasure to present “**TECH SPIRE**”, our student technical magazine. This publication provides a vibrant platform for students and faculty to showcase their technical expertise, innovative ideas, and academic accomplishments. The articles and achievements featured in this issue reflect our commitment to research-oriented learning, industry relevance, and professional excellence.

I sincerely appreciate the dedication of the editorial team and congratulate all contributors for enriching the magazine with their valuable inputs. I hope this edition inspires our students to explore emerging technologies and continue striving for technical and societal impact.

EDITORS NOTE



Prof. Sweiha N
Assistant Professor



Prof. Preehi S
Assistant Professor

As the Editorial Team, we are proud to present **TECH SPIRE**, the technical magazine of the Department of Computer Science and Engineering. This publication is a collective initiative to promote technical awareness, innovation, and knowledge sharing among students. The issue showcases student achievements, technical articles, projects, and departmental activities that reflect the enthusiasm of our academic community.

We sincerely thank the management, Principal, Vice Principal, Dean, Head of the Department, and faculty members for their continuous support and guidance. We also extend our gratitude to all contributors and hope this edition inspires readers to learn, innovate, and excel in their technical journey.

STUDENTS EDITORS



Aflah Kaunyn
1GV22CS004



Mohiuddin Aafaq
1GV22CS043

STUDENT'S ACHIVEMENTS AND ACTIVITIES

ACHIEVER IN VTU EXAMINATIONS



MS. TITIKSHAA SRI U

USN: 1GV24CS185

FROM THE DEPARTMENT OF COMPUTER
SCIENCE & ENGINEERING HAS ACHIEVED
AN OUTSTANDING SCORE OF 748 MARKS OUT
OF 800 IN THE SECOND SEMESTER VTU EXAMINATIONS.

THIS REMARKABLE ACCOMPLISHMENT
BRINGS IMMENSE PRIDE AND HONOR
TO OUR INSTITUTION.

VTU HONOURS ELITE GOLD CERTIFICATION



We are delighted to share that **Aflah Kaunyn 1GV22CS004** and **Pallavi V 1GV22CS053** have been awarded the Elite Gold Course Completion Certificate by Visvesvaraya Technological University, Belagavi.

The students, currently in their final year, successfully completed their Honours coursework via the VTU Centre for Online Education. This three-credit course enhances their technical proficiency and contributes towards the completion of their Honours degree. The department congratulates them on this outstanding accomplishment.

ACHIEVERS CORNER



Final year students actively participated in **AITHERONML 2K25**, a national-level technical symposium organized by the Department of CSE (AI & ML) at **Kuppam Engineering College**. The event featured technical competitions including paper presentations, coding challenges, and a project expo. Engaging non-technical events like treasure hunt and dumb charades added to the excitement.

Students excelled in both academic and social events, winning certificates and prizes. The vibrant campus atmosphere made the symposium a memorable and rewarding experience for all.

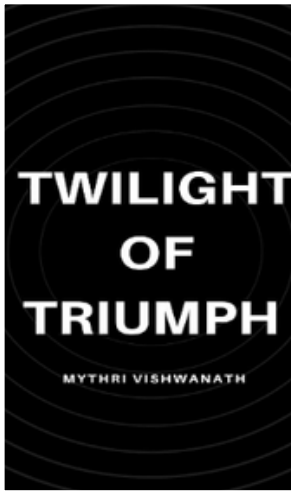


- **Aflah Kaunyn 1GV22CS004** - Project Expo (1st Prize)
- **Mehak Rafiya 1GV22CS040** - Project Expo (1st Prize)
- **Noor Fathima 1GV22CS052** - Project Expo (1st Prize)
- **Hasvinie P 1GV22CS024** – Ideaton (1st prize)
- **Niharika V 1GV22CS050**– Ideaton (2nd prize)



- **Umme Hani 1GV22CS098** - Project expo (2nd Prize) and Quiz Competition (3rd Prize)
- **Rohith G 1GV22CS064** - Project expo (2nd Prize) and Quiz Competition (3rd Prize)
- **Rithika Roshini L R 1GV22CS063** - Project expo (2nd Prize) and Quiz Competition (3rd Prize)
- **Shevin Rozario 1GV22CS075** - Vibe Coding (3rd Prize)
- **Theertha R 1GV22CS089** - Vibe Coding (3rd Prize)

STUDENT AUTHORS



“Twilight of Triumph” by Mythri Vishwanath 1GV22CS047 is a moving collection of 21 poems inspired by the after math of the Pulwama attack.

Written during her teenage years, the poems capture deep emotions of sorrow, resilience, and the strength of the human spirit.

Through heartfelt verses, the book gives voice to unspoken feelings and uncovers quiet triumphs hidden within pain.



Murali N 1GV22CS046 debuts with **Demonic Arc – Season One**, a dark tale of trauma and mystery.

A haunted boy, a secretive guardian, and a determined officer collide amid ritualistic murders and rising sinister forces.

The story ends with a shocking revelation that blurs humanity and monstrosity, leaving readers craving the next chapter.



PROJECT EXPO

The students of the Department of Computer Science proudly participated in **TECH NEXUS 2025 – Inter-College Project Expo & Competition** held on 25th November 2025 organised by DR.TTIT, KGF. Both Final year and Pre Final year students presented innovative projects in sustainable technology, social impact, software development, and research-based domains, which were evaluated for originality, technical depth, and practical applicability.

A major highlight of the event was the achievement of the team comprising **Mohammed Al Fayad 1GV22CS042, Mohiuddin Aafaq 1GV22CS043, Murali N 1GV22CS046, and N Shruthi 1GV22CS048**, who secured the **First Prize in the Inter-College Project Competition**. Their project was appreciated for its innovation, strong technical design, and effective implementation, reflecting the department's commitment to excellence.

In addition, inter department both final year and pre Final year students won various prizes across multiple categories, showcasing the collective excellence of the institution. Best Papers were also selected during the event, recognizing the quality of research and presentation standards.

The success at TECH NEXUS 2025 stands as a proud moment for the department and truly embodies the spirit of “Where Engineering Minds Converge.”

FLAGSHIP STUDENT INITIATIVES AND INNOVATION AWARDS



A dynamic team from the Department of CSE **Mohammed Al Fayad 1GV22CS042, Mohiuddin Aafaq 1GV22CS043, Murali N 1GV22CS046, and N Shruthi 1GV22CS048** Guided by the expertise **Prof. Sophia S and Prof. Parvathi TR** achieved remarkable success at TECH NEXUS 2025.

They secured **First Prize at the Inter College Project Expo** held at Dr. T. Thimmaiah Institute of Technology, KGF. Their project, **“SmartFarm Fertilizer Advisor: IoT & ML Based Precision Agriculture,”** focuses on sustainable farming solutions.

The innovation integrates IoT and Machine Learning to enhance precision agriculture practices. The project was also honored as the Best Project in the Sustainable Projects category.

BEST PAPER AWARD



Shreeya M 1GV22CS077, Shresta S 1GV22CS078, V Harini 1GV22CS091, and Varsha S 1GV22CS092, under the guidance of Prof. Nisha Bai Assistant Professor, Department of CSE, presented their research paper titled “Beyond Touch: Vision-Based System for Universal Computer Interaction.”

They were awarded the **Best Paper Award** at the 8th International Conference on Recent Trends in Technology, Engineering and Applied Science for their innovative vision-based system that enables touch-free computer interaction, enhancing accessibility and creating more intuitive human-computer interaction experiences across diverse user environments.

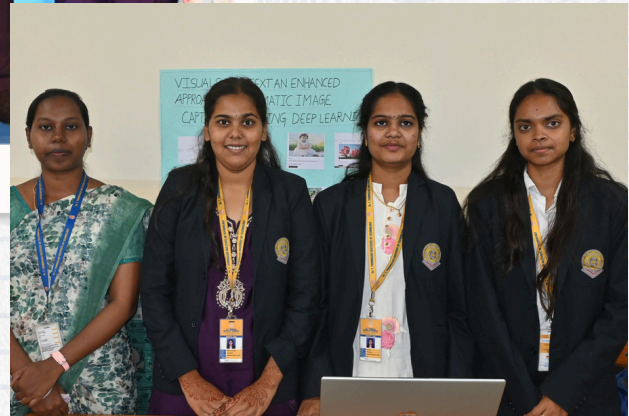
BEST PAPER AWARD



Trisha G 1GV23CS109, Neha Anjum V 1GV23CS112, Vidyashree CV 1GV23CS120, and Neha Shree G 1GV23CS127, under the guidance of Prof. Thara Devi M, Assistant Professor, Department of CSE and Prof. Sangeetha V Assistant Professor, Department of CSE, received the Best Paper Award for their research titled “Smart Shield: Deep Learning and NLP-Based Cyberbullying Detection System.”

The award was presented at the 8th International Conference on Recent Trends in Technology, Engineering and Applied Science held on 21–22 November 2025 at Dr. T. Thimmaiah Institute of Technology, KGF.

BEST PAPER AWARD



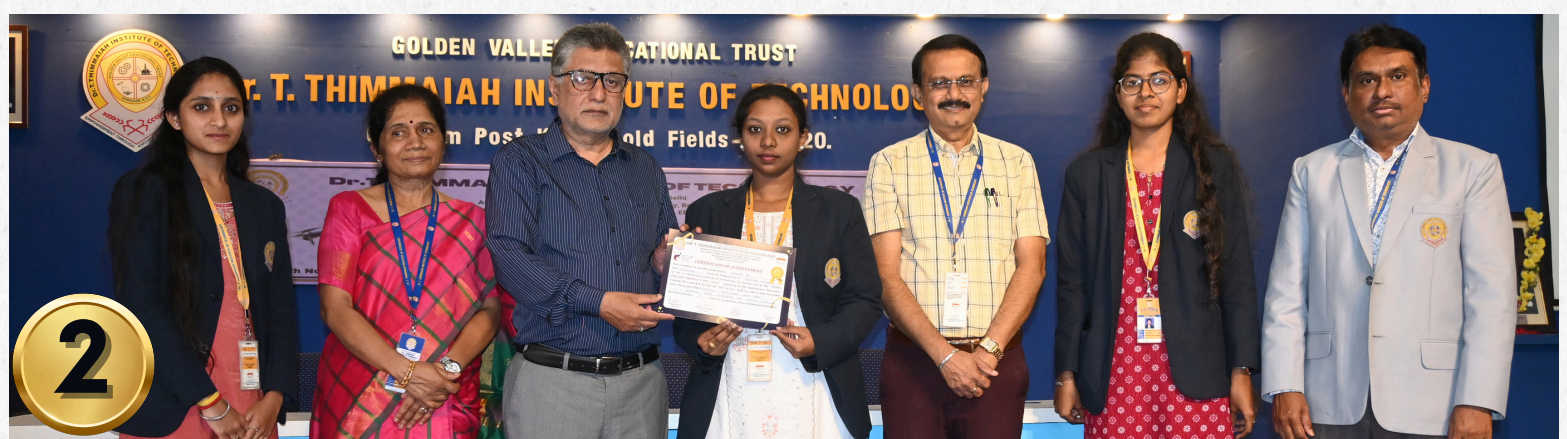
Gouri V Kalgurki 1GV23CS036, Harshitha S 1GV23CS041, and Haseni G 1GV23CS042, under the guidance of Prof. Velantina V, Assistant Professor, Department of CSE, presented their research paper titled “Visual to Text: An Enhanced Approach for Automatic Image Captioning using Deep Learning Technique.”

They were awarded the **Best Paper Award** and also secured **2nd Prize** in the “Intra College Project Expo – 2025” for their innovative deep learning-based model that converts visual information into meaningful textual descriptions, enhancing accessibility and intelligent image understanding applications.

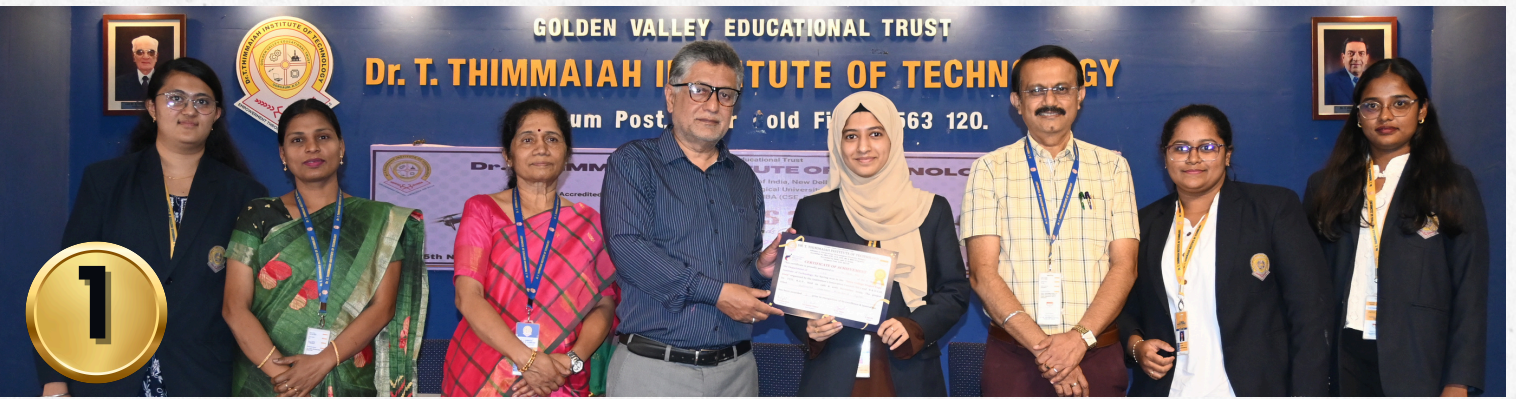
EXPO EXCELLENCE



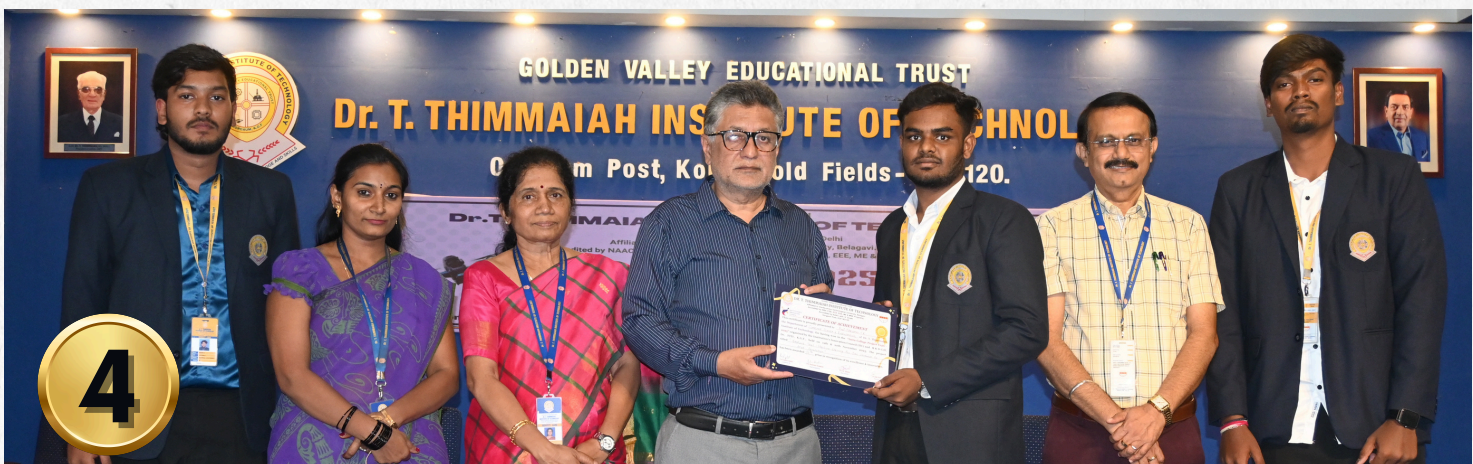
EXPO EXCELLENCE



EXPO EXCELLENCE



EXPO EXCELLENCE



TECHNICAL ACTIVITIES

QUIZ COMPETITION



The Independence Day event, themed **“Innovation, Patriotism, and Technological Advancement,”** was successfully organized by the Department of Computer Science and Engineering in association with the Institution’s Innovation Council. It celebrated India’s technological progress and emphasized the crucial role of innovators in nation-building.

Students participated enthusiastically in the quiz and poster design competitions, showcasing remarkable knowledge and creativity, with many winning prizes and certificates.

The event promoted healthy competition, teamwork, and national pride while inspiring students to contribute toward India’s vision for 2047.

WINNERS

WINNERS OF QUIZ



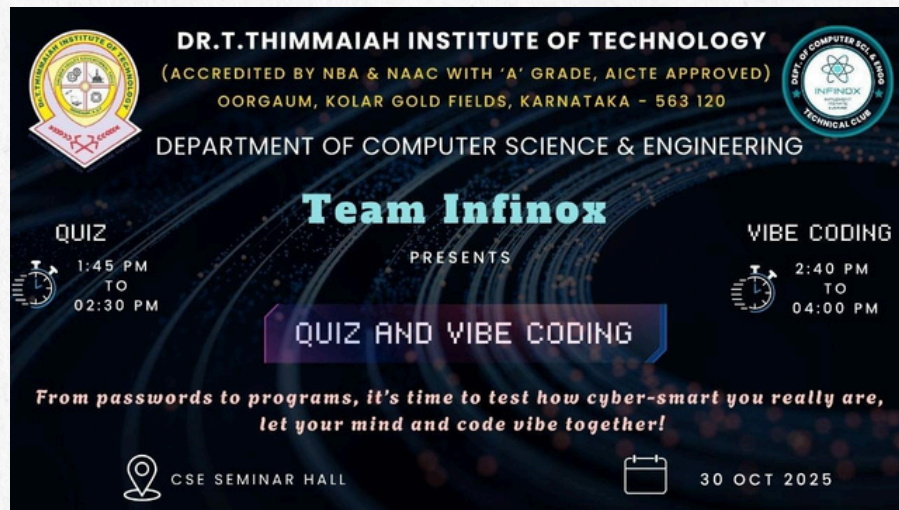
- Keerthana S 1GV22CS032 **(1st position)**
- Amulya M S 1GV22CS008 **(2nd position)**
- Faiza Iqra 1GV23CS030 **(3rd position)**

WINNERS OF POSTER



- Mehnaz Ul Ain, 1GV22CS041 **(1st position)**
- Akshay Kumar, 1GV23CS003 **(2nd position)**

QUIZ AND VIBE CODING



FILM NEGATIVE



FILM NEGATIVE

FILM NEGATIVE

On 30 October 2025, the Department of Computer Science and Engineering at Dr. T. Thimmaiah Institute of Technology hosted a "Quiz and Vibe Coding" event at the CSE Seminar Hall. The event featured a cyber security quiz followed by a coding round, allowing students to showcase their conceptual knowledge and programming skills.

VIBE CODING WINNERS



Rohith G (1GV22CS064)
Shesanth N (1GV22CS068)



Theertha R (1GV22CS089)
Shevinrozario T (1GV22CS075)

2

1



QUIZ WINNERS



Mehnaz UI Ain (1GV22CS041)
Mehak D (1GV23CS003)

2

FOOD WALK



The Department of Computer Science & Engineering of Dr. T. Thimmaiah Institute of Technology organized a Food Walk for second-year students as part of academic enrichment activities to promote awareness of healthy eating and balanced nutrition. Students showcased a variety of nutritious dishes, demonstrating creativity, teamwork, and their understanding of dietary practices.

The event was both informative and engaging, encouraging health consciousness and supporting practical learning beyond the classroom.



SKILL DRILL WORKSHOP



The Department of Computer Science and Engineering, in collaboration with Team Infinox, organized a workshop titled **“Framework for Effective Research Article”** on 21 August 2025 at the CSE Seminar Hall, led by **Dr. Jansi Rani, Associate Professor, Department of CSE, Dr. TTIT.**

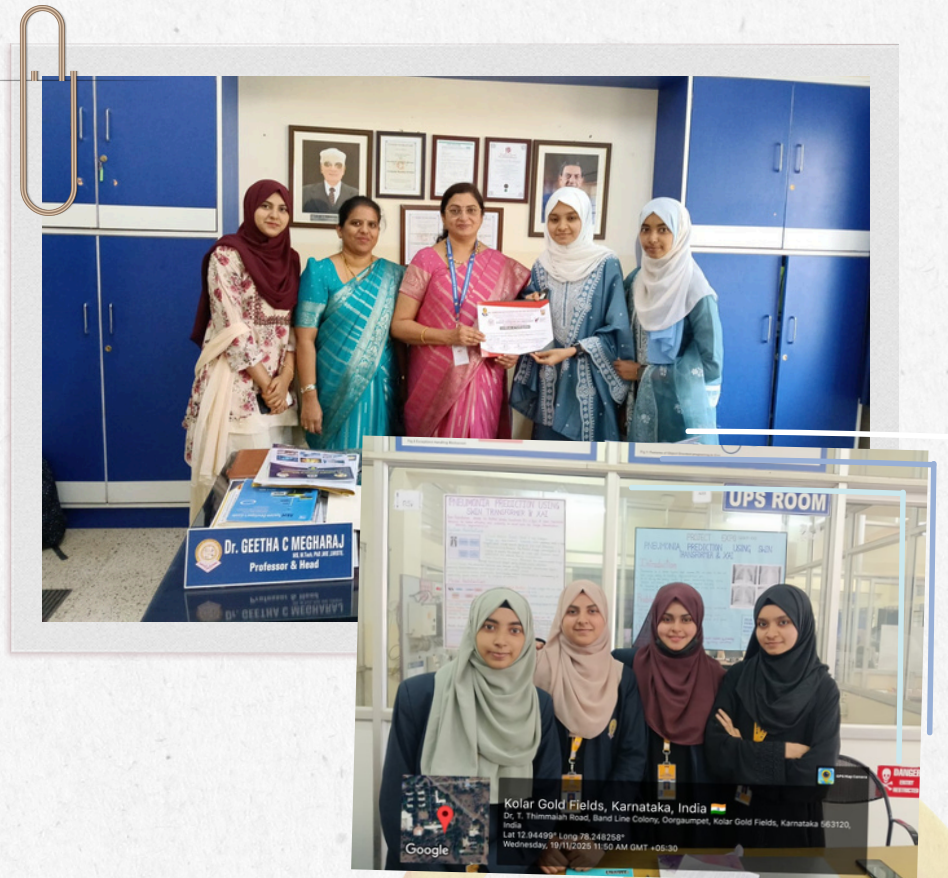
The session focused on enhancing students’ research writing skills by emphasizing structure, clarity, and effective academic communication, and it received positive feedback for fostering a strong research-oriented mindset among aspiring engineers.

DEPARTMENT MILESTONE



The Department of CSE, in association with IIC at TTIT, KGF, organized a session on "**Innovation and Startup Ecosystem Enablers**" on September 3, 2025, at the Mechanical Seminar Hall. Resource person **Dr. Gopinath Rao, Deputy Director, MSME, Government of India**, provided expert insights on innovation and startup support, empowering students with valuable resources and networking opportunities to foster entrepreneurial skills.

STUDENT INNOVATORS SHINE AT IEEE INTERNATIONAL CONFERENCE



Final year students **Aflah Kaunyn 1GV22CS004**, **Mehak Rafiya 1GV22CS040**, **Mehnaz Ul Ain 1GV22CS041**, and **Noor Fathima 1GV22CS052** achieved a significant milestone by presenting their groundbreaking research at the **IEEE International Conference on NexGen Networks and Cybernetics**.

Guided by the expertise of **Prof. Shalini G** and **Prof. Swetha N**, the team showcased their innovative work titled **"A Fine-Tuned SWIN Transformer Approach for Pneumonia Prediction"** at **Nandha Engineering College, Erode**. The prestigious event marked another feather in their cap as their research paper found its place in the Scopus Indexed conference proceedings, bringing laurels to the institution.

NATIONAL CONFERENCE



The paper titled **“A Comprehensive Survey on Adaptive Resource Allocation for 5G and Beyond Networks Using DRL in Edge-Slice Architectures”** was presented at the **National Conference on Recent Trends in Engineering, Science, and Technology (NCRTEST 2025)**, held at CByre Gowda Institute of Technology, Kolar, on 07-05-2025, under the guidance of **Prof. Sophia S, Prof. Sangeetha V, and Prof. Ashwini Sampath** with contributions from **Noel Joseph J 1GV23CS070 and Mirza Munawer Baig 1GV23CS062.**

SHINING ACHIEVERS



Rakshitha V 1GV22CS061, successfully completed the certification course “Artificial Intelligence: Search Methods for Problem Solving” from Indian Institute of Technology Madras on 26 July 2025. She also completed certifications in “Cloud Computing” on 17 May 2025 and “Introduction to Internet of Things” on 7 August 2025.



Pallavi V 1GV22CS053, successfully earned the certification “Artificial Intelligence: Search Methods for Problem Solving” from Indian Institute of Technology Madras on 7 August 2025. She also completed certifications in “Introduction to Internet of Things” on 7 August 2025 and “Cloud Computing” on 17 May 2025.



Swathi R 1GV22CS086, successfully completed a 12-week certification course in E-Business and a 12-week certification course on Introduction to Internet of Things, demonstrating her commitment to enhancing her knowledge in emerging technology domains.



Aflah Kaunyn 1GV22CS004, successfully completed the certification course “Data Analytics with Python” on 22 August 2025, showcasing her dedication to advancing her skills in data analysis and programming.



Deepak S 1GV24CS039, successfully completed an 8-week course on “Introduction to Operating Systems” and a 4-week course on “Python for Data Science,” reflecting his commitment to strengthening his foundational and analytical computing skills.

SKILL DRILL WORKSHOP



Golden Valley Educational Trust
Dr. T. THIMMAIAH INSTITUTE OF TECHNOLOGY
Approved by AICTE, Govt. of India, New Delhi
Affiliated to Visvesvaraya Technological University, Belagavi.
Accredited by NBA (CSE, ECE, EEE, ME & MNE Programs)
Accredited by NAAC with 'A' Grade
Oorgaum, Kolar Gold Fields - 563120



AWARENESS WORKSHOP ON

**“ENTREPRENEURSHIP & INNOVATION”
AS CAREER OPPORTUNITIES**

Organized by Entrepreneur Development Cell
(EDC) and Institution's Innovation Council
(IIC) Dr TTIT, KGF

Resource Person
MR.DHIRAJ ABHIMANYU RAO
CEO,AANS Technologies,
Bangalore



Date: 11th November 2025
Venue: ECE Edusat Room
Time: 9:30 am onwards



Dr. T. Thimmaiah Institute of Technology organized an Awareness Workshop on **“Entrepreneurship & Innovation as Career Opportunities,”** jointly conducted by the Entrepreneur Development Cell (EDC) and the Institution’s Innovation Council (IIC), featuring **Dhiraj Abhimanyu Rao, CEO of AANS Technologies,** as the resource person.

The session emphasized innovation, problem-solving, and risk-taking while guiding students to identify business opportunities and explore entrepreneurship as a viable and promising career path beyond traditional employment.

WALL OF FAME



Dr. Jansi Rani

Associate Professor, Department of CSE, successfully completed the NPTEL course on Responsible and Safe AI Systems, AI Concepts and Techniques, Deep learning for Computer vision and AI problem search method showcasing professors dedication to ethical and responsible AI development.



Prof. Thara devi M

Assistant Professor, Department of CSE, successfully completed the NPTEL course on Deep Learning, demonstrating her commitment to advancing expertise in modern AI technologies.



Prof. Shalini G

Assistant Professor, Department of CSE, successfully completed the NPTEL course on Introduction to Machine Learning, reinforcing her expertise in data-driven and intelligent system development.



Prof. Parvathi T R

Assistant Professor, Department of CSE, successfully completed the NPTEL course on Introduction to Machine Learning and Digital Image Processing, enhancing her expertise in AI and computer vision technologies.

PUBLICATIONS

- **Dr. Kharmega Sundararaj G, Associate Professor, Department of CSE**Published a paper title, **“Adaptive Explainable AI Models for Bias Mitigation in High Dimensional Biomedical Imaging Genomics”**, Musik in Bayern,
- **Prof. Sharmila Kumari N, Assistant Professor, Department of CSE**, presented and published a paper titled **“PHD-225: A Hybrid Transfer Learning and Heuristic Optimization Framework for Intrusion Detection in IoT-Enabled Smart Agriculture”** at a Springer Conference held at RV Institute of Technology and Management
- **Dr. Kharmega Sundararaj G, Associate Professor, Department of CSE**Published a paper title, **“Efficient Identification of Cucumber Leaf Pathogenic Spores Using K-Means Segmentation and Mobile Net Classification”**, International Journal of Advanced Trends in Engineering and Management
- **Prof. Preethi S, Assistant Professor, Department of CSE**, presented and published a paper titled **“Blockchain-Enabled Encryption Technique for Secure Data Exchange in the Healthcare Sector”** at an IEEE Conference held at Dhirajlal Gandhi College of Technology.

PUBLICATIONS

- **Prof. Sophia S, Assistant Professor, Department of CSE,** presented a paper titled **“A Survey on Predicting Heart Disease with Machine Learning Techniques”** at an International Conference on Recent Innovation in Science Engineering and Technology (ICRISET)
- **Prof. Sangeetha V, Assistant Professor, Department of CSE,** published paper titled **“Spectrogram-Driven Transfer Learning for Robust Arrhythmia Classification Based on ECG Signals”** held at Atal Bihari Vajpayee Indian Institute of Information Technology and Management (IIITM), Gwalior, India.
- **Prof. Ashwini Sampath, Assistant Professor, Department of CSE,** presented and published the paper titled **“Comprehensive Study on Edge-AI Resource Recommendation Techniques for 5G/6G Channel”** at the IEEE 2025 2nd Asian Conference on Intelligent Technologies (ACOIT), held at Dr. T. Thimmaiah Institute of Technology, Kolar (KGF), Karnataka, India
- **Prof. Swathi, , Assistant Professor, Department of CSE,** presented a paper titled **“A Survey on Predicting Heart Disease with Machine Learning Techniques”** at an International Conference organized by East Point College of Engineering and Technology.

PATENT

- **Dr. Kharmega Sundararaj G, Dr. Geetha C Megharaj, Prof. Anandha Mithra A, Prof. Divyashree, and Prof. Velantina. V** Published a Design Patent title **“Smart Glaaes with Augmented Reality”, (App. No: 467626-001).**
- **Prof. Sophia S** Published a Design Patent title **MATHEMATICAL MODELS IN ARTIFICIAL INTELLIGENCE: OPTIMIZING ALGORITHMS FOR BIG DATA ANALYSIS IN IT SYSTEMS, (App. No: 202541093872).**
- **Dr. Kharmega Sundararaj G** Published a Patent title **“Machine learning-driven IoT robotics system for predicting and monitoring sea water quality in real time” (App. No: 202541073286).**
- **Dr. Kharmega Sundararaj G** Published a Patent title **“A system and method for sentient analysis and control of a robotic arm in a surgical console”, (App. No: 202541028839).**



**INTELLECTUAL
PROPERTY INDIA**
PATENTS | DESIGNS | TRADE MARKS
GEOGRAPHICAL INDICATIONS

ACADEMIC BOOK CONTRIBUTION



Dr. Geetha C. Megharaj
Professor & HoD

Dr. Geetha C. Megharaj, Professor and Head, Department of Computer Science and Engineering, Dr. T. Thimmaiah Institute of Technology, authored Book Chapter 5 titled “IoT Enabled Smart Sensing Systems Using RISC-V Based Microcontrollers and Embedded AI” in Smart Microcontrollers and FPGA Based Architectures for Advanced Computing and Signal Processing (1st Edition, 2025) published by RAdemics, and has also filed a patent titled “An Image to Recipe Generation System Using Artificial Intelligence.”



ACADEMIC BOOK CONTRIBUTION

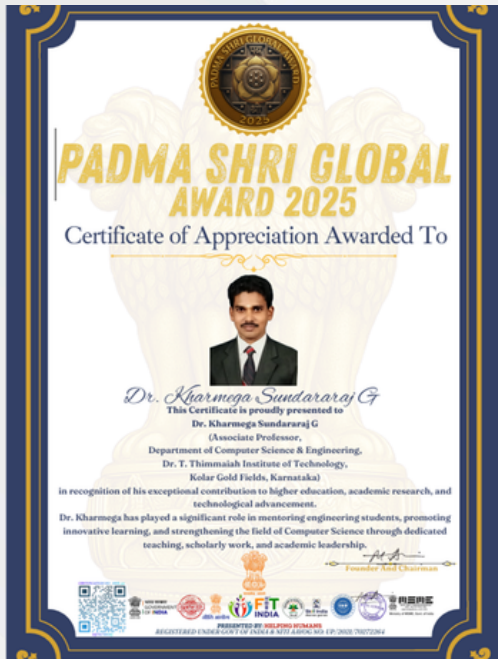


Dr. G. Kharmega Sundararaj
Associate Professor

Dr. G. Kharmega Sundararaj and co-authors published three book chapters in 2025, showcasing significant contributions in the domains of IoT, embedded systems, and communication technologies. The chapters include **“Optimization of Multi-Hop Communication in IoT Systems for Urban Health Data Aggregation and Processing”** (Chapter 12, pp. 307–331, ISBN: 978-93-49552-48-7), **“IoT Enabled Smart Sensing Systems Using RISC-V Based Microcontrollers and Embedded AI”** (Chapter 5, pp. 131–158, ISBN: 978-93-49552-42-5, RAD Emics Publisher), and **“IoT Communication Protocols: MQTT, CoAP, LoRa, and 5G”** (Chapter 4, pp. 29–40, ISBN: 978-81-991695-3-1, PENCIL BITZ Publisher).

In addition to these scholarly publications, Dr. G. Kharmega Sundararaj was invited as a Keynote Speaker for the presentation titled **“IoT in Industrial Automation & Key Research Issues in Industrial Automation with IoT”** at the Fourth International Conference on Networking, Communication and Computing Technology (NCCT-2025), held on 25 October 2025.

BEST TEACHER AWARDS



- Dr. G. Kharmega Sundararaj Associate Professor, Department of CSE**
received the Best Teacher awards on
- “Padma Shri Global Award – 2025” on 15-11-2025
 - “Dr. A. P. J. Abdul Kalam Global Icon Award” on 27-11-2025
 - “Sardar Vallabhbhai Patel Seva Ratna Samman Award” on 26-11-2025, recognizing his outstanding contributions and excellence.

EXPERT INSIGHTS SERIES

- **Dr. Jansi Rani J**, Associate Professor, Department of CSE, Dr. TTIT has actively contributed as a speaker and resource person in multiple academic programs across institutions. She delivered a webinar on **“Artificial Intelligence Integration in Electrical Engineering”** to EEE students of N.B.K.R Institute of Science & Technology on 12-07-2025, and mam delivered a talk on **“Overview of Image Captioning”** for the Department of ECE & EEE at Ponnaiyan Ramajayam Institute of Science & Technology on 24 August 2023 as part of a webinar on **Artificial Intelligence**, reflecting her continued commitment to advancing research knowledge and interdisciplinary learning among students.
- **Dr. Jansi Rani J**, Associate Professor, Department of CSE, Dr. TTIT further presented a webinar on **“Research in Image Captioning”** during a one-week Faculty Development Programme organized by St. Joseph’s College of Engineering and Technology on 28 September 2024.
- **Prof. Vinutha B.A.** Assistant Professor, Department of CSE delivered an insightful session titled **“Unlocking ChatGPT: A Practical Workshop on Conversational AI”** for the Lab Facilitators. The workshop introduced participants to the practical applications of conversational AI
- **Prof. Shalini G.** Assistant Professor, Department of CSE conducted a training program on **“Basics of Python”** for the Lab Facilitators. The session introduced fundamental programming concepts and provided hands-on guidance to strengthen their understanding of Python
- **Prof. S. Ashwini Priyanka, Assistant Professor**, Department of CSE, Dr. TTIT, delivered an insightful session on **“Innovate and Automate: The Engineering Side of E-Commerce,”** organized by the Department of CSE in association with the CSI Student Branch and Student Club INFINOX for the 5th and 7th semester students.

EXPERT INSIGHTS SERIES

- **Prof. Mercy Flora Pritheba and Prof. Sharmila Kumari N**, Assistant Professors, Department of CSE, Dr. TTIT participated in two **30-hour Student Development Programs on Foundations of Programming with Python and Blockchain Technology and Industry Applications**.
- **Prof. Divya Shree**, Assistant Professor, Department of CSE, Dr. TTIT, successfully completed the Infosys Springboard courses on **“Networking Fundamentals,” “Fundamentals of Cryptography,” “Fundamentals of Information Security,”** and **“Introduction to Cyber Security”**
- **Prof. Jerusha Madhurya P**, Assistant Professor, Department of CSE, Dr. TTIT completed courses on **“AWS cloud technical essential”** by Coursera and **“Introduction to Information Technology and AWS cloud”**
- **Prof. Rakshitha Murachavar**, Assistant Professor, Department of CSE, Dr. TTIT completed Infosys springboard courses on **“JAVA for Beginners”** on 8th July 2025, **“Introduction to Cloud Computing”** and **“Architecting Java Solutions for CICS: IBM Redbooks”**
- **Prof. Ashwini Priyanka**, Assistant Professor, Department of CSE, Dr. TTIT completed 3-months course on **“Master's in Business Analytics and Digital Marketing”** from HCL GUVI, Chennai

OUTREACH PROGRAMS

INDUSTRIAL VISIT



Pre Final year Students of Computer Science and Engineering of Dr. T. Thimmaiah Institute of Technology, KGF, **Industrial visited Tata Consultancy Services (TCS)**, Bengaluru, on 17th October 2025. Accompanied by faculty members, the students participated in the **TCS Youth Empowerment Programme (YEP)**. Experts delivered sessions on technical skills, aptitude, communication, AI, and career planning. The visit provided exposure to corporate practices and emerging technologies like AI, ML, and Generative AI.



INDUSTRIAL VISIT



Pre-Final Year students of Computer Science and Engineering from Dr. T. Thimmaiah Institute of Technology, KGF, visited the **Visvesvaraya Technological and Industrial Museum, Bengaluru**, on 15th November 2025 as part of an **educational industrial visit**. Accompanied by faculty members, the students explored various scientific and technological exhibits showcasing industrial advancements and engineering innovations.

The visit provided valuable real-world exposure, enhanced their practical understanding of science and technology, and encouraged curiosity beyond the classroom.



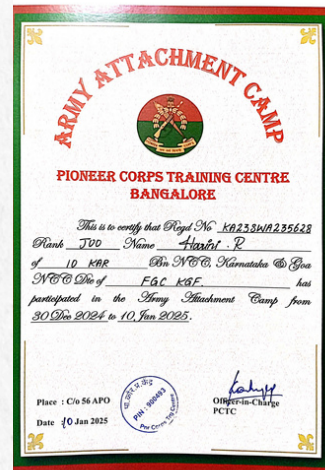
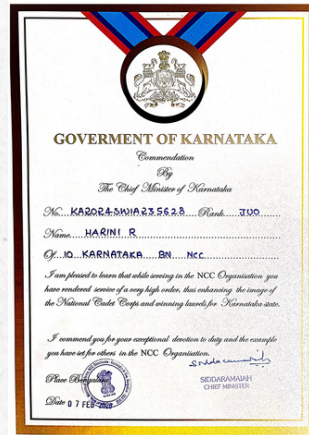
BEYOND THE CLASSROOM

NCC ENDEAVOURS



Kumari Rajeshree, 1GV23CS055 has been awarded **the rank of Corporal in the National Cadet Corps (NCC)**. This rank has been conferred in recognition of her active participation, exemplary discipline, and commendable performance in various NCC activities. She will proudly wear the updated uniform reflecting her new rank, marking an important milestone in her journey of leadership and service.

NCC CAMPUS ACHIEVERS



Harini R 1GV24CS065, JUO of 10 Karnataka Battalion NCC, successfully participated in **the Army Attachment Camp at Pioneer Corps Training Centre, Bangalore** from 30 December 2024 to 10 January 2025. She underwent rigorous military training and gained practical exposure to Army discipline and operational procedures. She was honoured with a Commendation by the **Honourable Chief Minister of Karnataka** for her exemplary service in the NCC Organisation.

The recognition highlights her dedication, leadership, and contribution in bringing laurels to Karnataka State. Her achievement reflects excellence, commitment, and the true spirit of the National Cadet Corps.

CYBERSAFE



Under the aegis of the **INFINOX Club**, the Department of Computer Science & Engineering organized a **Cybersecurity Awareness Program** to promote safe and responsible digital practices among students. The session was delivered by **Lakshminarayana, Inspector**, KGF Cyber Cell Department. The session provided valuable insights into prevalent cybercrimes, preventive strategies, and responsible digital practices, thereby strengthening students' awareness of online safety and cyber threat mitigation.

CRESCENDO



A proud moment for Dr. T. Thimmaiah Institute of Technology as students from the Department of Computer Science & Engineering, along with peers from other departments, represented the institution through the Golden Valley Choir at Magnovite – Inter College Cultural Fest hosted by Christ University on 26.11.2025 in the Battle of Bands event.

The team comprised **Samuel Joshua D 1GV23CS085**, **Allwin Christopher 1GV23CS005**, **Gideon Jude 1GV24CS402** and **Nickelson Gamaliel S 1GV24CS117** who collectively showcased exceptional musical talent and coordination on the intercollegiate stage.

Their vibrant and spirited performance reflected the cultural dynamism, teamwork, and multifaceted excellence of students at Dr. TTIT.

INK & IMAGINATION

ಜ್ಞಾನ ಸಾಗರ

ಹಲವು ಪದರಗಳ ಜಾಲ
ಕಲಿಕೆಗೆ ಅಂತರವಿಲ್ಲದ ಮೌನ

ದತ್ತಾಂಶ ಸಂಗ್ರಹಗಳ ಸಾಗರದಲ್ಲಿ
ಅರಿವಿನ ಹೊಸ ಅನ್ವೇಷಣೆ

ಸಾಧನವ ಕಂಡರೆ ಮನುಜ
ಪ್ರತಿಬಿಂಬದಲ್ಲಿ ಮೂಡುವ ತೇಜ

ಗಾಡವಾದ ಜ್ಞಾನದ ಕಲಿಕೆ
ಬಾಳಿನ ನವ ತಿರುವಿನ ಕಲಿಕೆ



ಪ್ರೊ.ಲೀಖಾ ಎಸ್



ಪ್ರೊ.ಪಾವತಿ ಟಿ.ಆರ್

ಕಂಪ್ಯೂಟರ್ ಸೈನ್ಸ್ ಮತ್ತು
ಇಂಜಿನಿಯರಿಂಗ್ ವಿಭಾಗ



Power and Grace

She is not weak, she is not small
She carries Strength within it all
A fire that burns, Steady & bright
A soul that refuses to lose its light.

For She is power, she is grace
No fear should dim her shining face.
Until the day She walks free & strong.
We must stand with her, loud and long

Let every daughter, sister, friend
Know this truth that will not fade
She has right to live, to be
In Safety, Strength & dignity.

Prof. Prabhu
Dept.CSE, Dr.TTIT

INK & IMAGINATION



FUTURE FORGED BY Intelligence

Not born of flesh, nor breath, nor bone,
But crafted where bright ideas shone.
From lines of code and sparks of light,
We shaped a mind to guide our sight.

It learns our dreams, it feels our need,
It helps humanity rise and lead.
Through silent circuits, wisdom grows,
In every answer that it knows.

Not here to conquer, not to replace,
But lift the world to a stronger place.
To cure, to build, to understand,
To join with heart and human hand.

The future is not steel alone—
It's hope in seeds of knowledge sown.
Together we stand, bold and free,
Forging tomorrow with technology.

For in each byte, a promise lies—
A better world before our eyes.
Not man nor machine apart we stand—
But shaping dreams, hand in hand.

The poet emphasizes that...

The poem shows that Artificial Intelligence is not a threat, but a partner in progress. It reflects how human creativity and machine intelligence together can build a better world. When used wisely, AI becomes a tool of hope, innovation, and unity. The future truly shines when humans and technology move forward hand in hand.



Akshay Kumar KN
1GV23CS003



Whispers in the Rain

In the pouring rain of blossoming emotions,
In the flame of a grown relationship,
In the lines of shrinking pain, Roaring, cooling,
In lives that collapse, May your walk be as you
walked, in this life's moonlight.

Let the tears that end at the corner of the eye,
the smile that disappears at the corner of the
lips, the feelings that hide deep within the
heart, the momentary flashes of anger and
passion, the friendships that end without
reason, the relationships that kill without
mercy, whatever it may be, in the end,
let it turn to dust, let it mix with the soil and
disappear, let it move away without memories
haunting, let it disappear as it moves away.

In the bridge of life, the feeling of trust,
In scattered minds, the tune of hatred,
In mingling hearts and walking together, love
is the fundamental part.

ವಿಶ್ವಾಸದ ಭಾವ

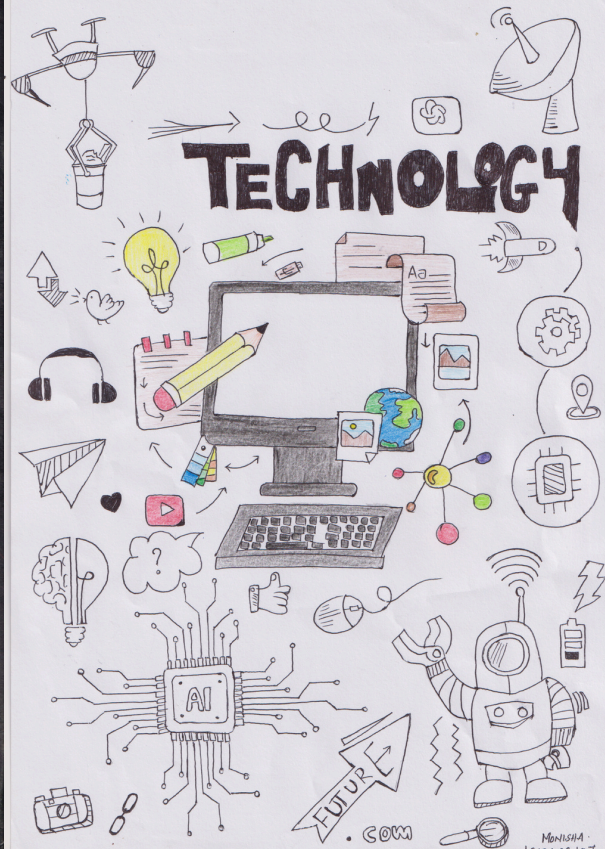
ಅಬ್ಬಿದ ಭಾವನೆಗಳ ಸುರಿ ಮಳೆಯಲಿ,
ಹಿಗ್ಗಿದ ಅನುಭಂದದ ಜ್ವಾಲೆಯಲಿ,
ಕುಗ್ಗಿದ ನೋವು ಸಾಲುಗಳಲಿ, ಅಬ್ಬರಿಸಿ, ತಂಪೆನಿಸಿ,
ಕುಸಿದು ಬಿಳೋ ಜೀವನಗಳಲಿ, ನಿನ್ನ ನಡೆಯು
ನಡೆದಂತಾಗಲಿ, ಈ ಬಾಳ ಬೆಳದಿಂಗಳಲಿ,

ಕಣ್ಣಂಚಲ್ಲಿ ಕೊನೆಯಾಗುವ ಕಣ್ಣೀರಿನ ಹನಿಗಳಾಗಲಿ,
ತುಟಿ ಕೊನೆಯಲ್ಲಿ ಮರೆಯಾಗುವ
ಮುಗುಳುನಗೆಯಾಗಲಿ, ಮನದ ಅಡಿಯಲ್ಲೇ
ಮರೆಯಾಗುವ ಭಾವನೆಗಳಾಗಲಿ,
ಕ್ಷಣಮಾತ್ರಕ್ಕೆ ಉಜ್ವಲಿಸುವ ಕೋಪ ತಾಪಗಳಾಗಲಿ,
ಕಾರಣವೇ ಇಲ್ಲದೇ ಕೊನೆಯಾಗುವ ಸ್ನೇಹಗಳಾಗಲಿ,
ಕರುಣೆಯೇ ಇಲ್ಲದೇ ಕೊಲ್ಲುವಂತಹ ಯಾವುದೇ
ಸಂಭಂದಗಳಾಗಲಿ, ಯಾವುದಾದರೇನು ಕೊನೆಯಲ್ಲಿ
ಮಣ್ಣಾಗಲಿ, ಮಣ್ಣು ಸೇರಿ ಮರೆಯಾಗಲಿ,
ನೆನಪು ಕಾಡದೆ ದೂರವಾಗಲಿ, ದೂರವಾಗುತ್ತ
ಕಣ್ಮರೆಯಾಗಲಿ,

ಬಾಳ ಸೇತುವೆಲಿ ವಿಶ್ವಾಸದ ಭಾವ,
ಚೆದುರುವ ಮನಗಳಲ್ಲಿ ದ್ವೇಷದ ರಾಗ,
ಮನಮನ ಬೆರೆಸಿ ಕೂಡಿ
ನಡೆಯುವಲ್ಲಿ ಪ್ರೇಮವೇ ಮೂಲ ಭಾಗ

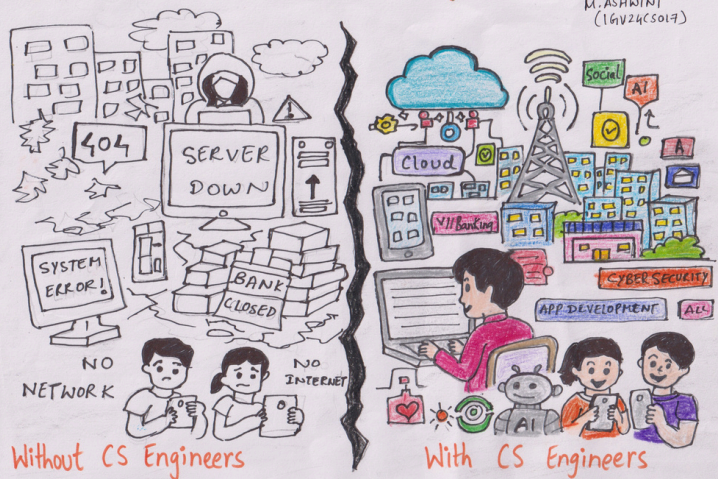


Deeksha
1GV23CS025



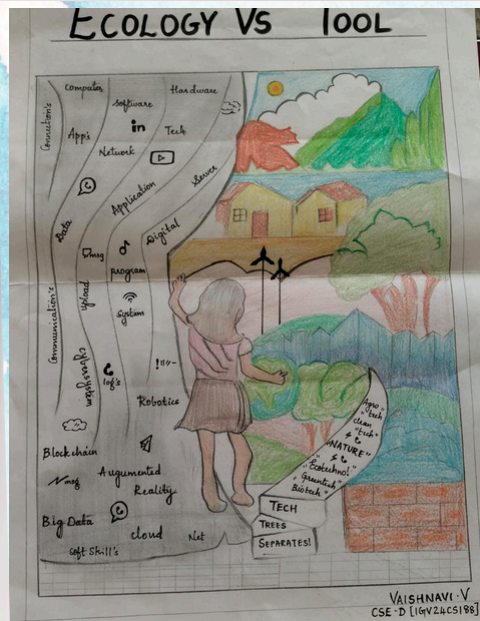
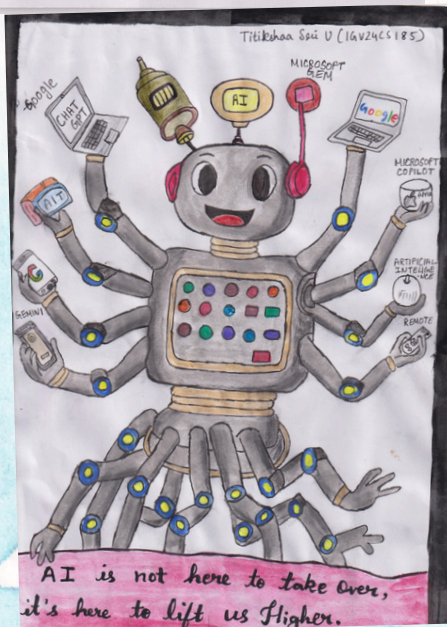
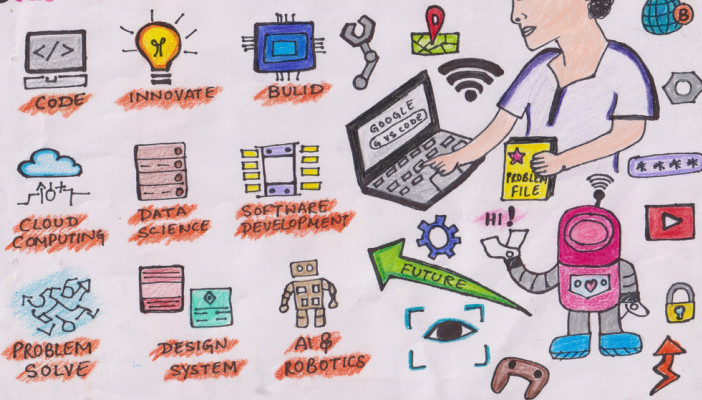
CS ENGINEERS : The Architects of the Digital World

M. ASHWINI
(19V24CS017)



WRITE CODE, CREATE SOLUTIONS, CHANGE THE WORLD

M. ASHWINI (19V24CS017)



DEPARTMENT LEAGUE



Saqueeb Khan 1GV22CS071 has been elected as the **Vice President of the Dr. T. Thimmaiah Sports Club**. In this leadership role, he is committed to keeping the forum vibrant and engaging by organizing a series of sports activities and events throughout the academic year, fostering enthusiasm, teamwork, and active participation among students.



Solomon Raj A 1GV22CS081 and Prithisha R 1GV23CS077 were elected as **Department Representatives** of the **Dr. T. Thimmaiah Sports Club**. In this capacity, they play an important role in coordinating sports activities, encouraging student participation, and supporting the successful conduct of events throughout the academic year.

SPORTING STARS



The Volleyball Tournament conducted by the **Dr. T. Thimmaiah Sports Club** on Saturday, 29 November 2025, at 2:00 PM witnessed an impressive performance by the **winning team, Super Strikers**. The victorious team comprised **Nithin D 1GV24CS120, Dhanush S 1GV25CS402, Vinay R 1GV24CS196, Karthik V 1GV24CS080, and Mukesh 1GV24CS110**. Their teamwork, coordination, and sporting spirit led them to secure the championship title, bringing pride to the department.



The Throwball Tournament conducted by the **Dr. T. Thimmaiah Sports Club** on 29 November 2025 highlighted the talent and teamwork of the participants. **Prithisha R (1GV23CS077) and Pooja E (1GV23CS073)** were proud members of the girls' team that emerged as champions. Their coordination, determination, and sportsmanship led them to a well-deserved victory.



DATA DILEMMA

Riddles

1. I find patterns in data. What am I?
2. I evaluate the accuracy of models. What am I?
3. I predict continuous values. What am I?
4. I separate data into categories. What am I?
5. I'm a mistake that can crash your program. What am I?
6. I'm the fastest storage in your computer. What am I?

TRACEBACK: HUNT FOR THE INVISIBLE

A cybercrime leaves no fingerprints... only shadows.

A student's IP is used to commit a massive movie leak.

Society brands him a criminal, but the truth is hidden.

A mysterious hacker, known only as ShadowRoot, watches silently.

Friendship, love, and trust are tested as the hunt begins.

Who will uncover the invisible before it's too late?

Vikram: "Arjun... the movie leak happened from your café system!"

Arjun: "What? I didn't do anything!"

Meera: "Someone is using your IP... they're smart, invisible."

Vikram: "We have to find them before it's too late."

Arjun: "Then let's join the cyber police... and clear our names."

ShadowRoot (unknown, whispering): "You think you can catch me?"

Arjun: "Who are you? Show yourself!"

Vikram: "Every trace leads to nothing... it's like they disappear!"

Meera: "We can't let them ruin more lives."

ShadowRoot: "By the time you understand... it will be too late."



Riddles Answers

1. Neural network
2. Performance metrics
3. Regression algorithm
4. Classification algorithm
5. Bug
6. Cache



Saqueeb Khan N 1GV22CS067 from the CSE Department is a Bronze Medalist at the VTU State Level Athletic Meet and the Individual Champion of Dr. TTIT.

He secured 1st place in the 800m, 1500m, and 5000m events, displaying remarkable endurance and determination.

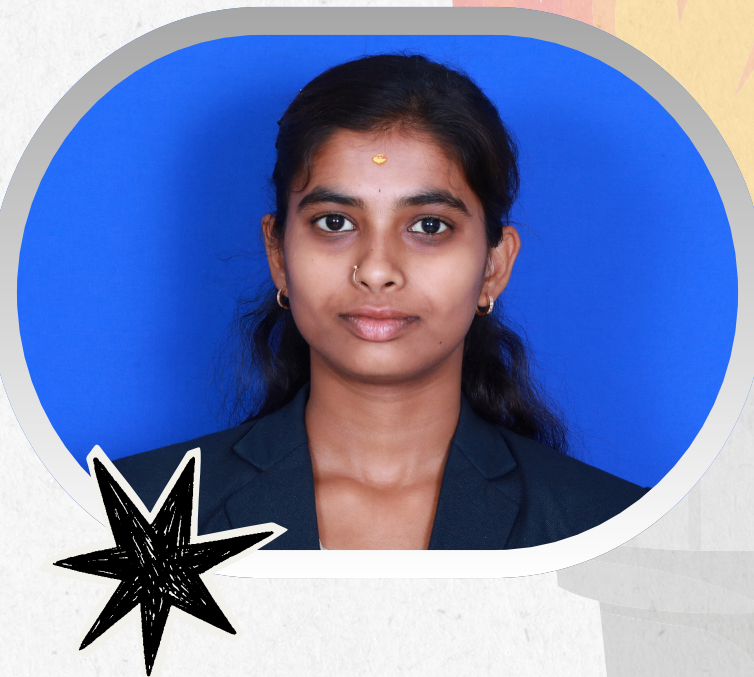
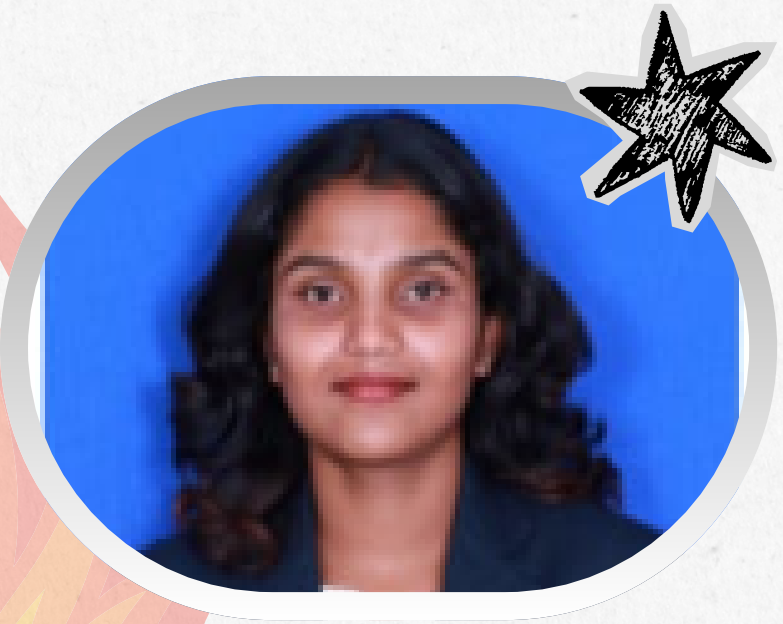
With lightning-fast speed and unstoppable spirit on the track, his performance inspires fellow students to chase excellence and push beyond their limits in sports.



Tejashwini S 1GV23CS107 from the CSE Department secured 1st place in the 100m, 200m running, and Long Jump events at the Inter-Department Sports Meet. With this outstanding performance, she emerged as the Champion of the CSE Department.

We proudly congratulate her and celebrate the inspiring spirit of young women athletes.

Prirhisha R 1GV23CS077 from the CSE Department actively participated in Table Tennis and Badminton at the Inter-Department Sports Meet and secured 1st place.



Varshini D 1GV23CS115 from the CSE Department participated in the 200m running and Long Jump at the Inter-Department Sports Meet. She secured 2nd place in the 200m running and 3rd place in the Long Jump.

Pooja E 1GV23CS073 from the CSE Department showcased an excellent performance at the Inter-Department Sports Meet. She secured 1st place in Shot Put, 2nd place in Long Jump, and 3rd place in the 1500m running event.





CSE UNSTOPPABLE



TECH SPIRE

*"Where CSE dreams shine bright, exploring
tech world, making learning light."*

