



GLOBAL ACADEMY OF TECHNOLOGY

GROWING AHEAD OF TIME



DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING

PRESENTS



EDUCATE COMPETE EXCEL!!



MAGAZINE

JAN-JUNE 2025

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PRINCIPAL'S MESSAGE

Dear Readers,

Each year, this magazine becomes more than just a collection of articles and achievements, it becomes a mirror reflecting the spirit of our college, our students, and the times we live in.

We are living in a unique era. Our students, belong to a generation that is both incredibly fortunate and deeply challenged. They have access to limitless information, endless innovation, and global perspectives, all at their fingertips. But at the same time, they are navigating a fast-changing world with increasing pressure to perform, to adapt, and to discover who they really are, personally and professionally.

What I admire about this generation is their courage. Their openness. Their willingness to talk about mental health, identity, purpose, and the kind of future they want to build. It's different from how things used to be, and that's not a bad thing. Growth means change. And change means stepping into the unknown - something our students do every single day.

This magazine is a small reflection of that journey. It includes voices that are learning, experimenting, and finding meaning. Whether it's through technology, business ideas, art, or personal stories. What ties it all together is heart and honesty.

To all our students: I see you, I hear you and I'm proud of how you show up - not just in your academics, but in the way you express yourselves, support each other, and grow into individuals who think, feel, and lead with empathy.

A heartfelt thanks to the editorial team and everyone who contributed to this issue. May this magazine inspire, challenge, and remind us all why we do what we do.

With warmth and respect,
Dr. H. B. Balakrishna
Principal
Global Academy of Technology



HEAD OF THE DEPARTMENT'S MESSAGE



As we publish this magazine, I would like to congratulate our students and faculty for their outstanding contributions to the field of Electronics and Communication Engineering. This magazine showcases the innovative ideas, research, and achievements of our department, and I am proud to see our students and faculty excel in their pursuits.

Our department is committed to providing a platform for students to explore their creativity, develop their skills, and stay updated with the latest advancements in technology. I hope this magazine inspires and motivates our readers to explore new frontiers in technology and innovation.

I appreciate the efforts of our students and faculty who have contributed to this magazine, and I wish the editorial team all the best for future issues. I am confident that this magazine will become a valuable resource for our students, faculty, and the broader engineering community.

Dr. Madhavi Mallam
HOD,ECE

PROFESSOR'S MESSAGE



It is a matter of great pride and satisfaction to witness the vibrant energy, creativity, and commitment of our students, which are eloquently showcased in this edition of the newsletter. The Office of the Dean of Student Affairs is dedicated to fostering a supportive and inclusive campus environment that promotes the holistic development of every student. We are committed to nurturing responsible, confident, and socially conscious individuals through active engagement in cultural, technical, social, and sporting activities.

Our mission is to provide platforms that enable students to explore their talents, enhance their skills, and realize their full potential. I extend my sincere appreciation to all contributors and encourage every student to remain inquisitive, actively participate in campus life, and uphold the values of integrity, respect, and excellence.

Dr. Ravi J
Professor and Dean,
Student Affairs

EDITORIAL NOTE

Dear Readers,

Welcome to the latest edition of **ECE 360°**, your trusted source for insights, innovation, and inspiration in the world of electronics engineering.

In this issue, we delve into the dynamic intersections of hardware, software, and intelligent systems that are shaping the future of technology. From breakthroughs in semiconductor design to the expanding role of AI in embedded systems, we bring you thought-provoking articles, expert interviews, and real-world case studies that reflect the pulse of the industry.

As electronics engineers, we find ourselves at the forefront of a technological evolution — one that demands not just technical acumen but also adaptability and vision. This magazine aims to be more than just a publication; it's a platform for knowledge sharing, professional growth, and community building.

Whether you're a seasoned engineer, a researcher, or a student stepping into this exciting field, we hope this issue sparks curiosity, encourages innovation, and keeps you connected with the latest trends and challenges.

Thank you for being a part of our growing readership. Your passion for engineering excellence continues to inspire us.

Warm regards,

Kruthik Chand D C

Assistant Professor

STUDENT EDITORS

- VINDYA G, 7TH SEM
- RACHANA M, 7TH SEM



PROMOTIONS



Dr. Ravi J
Dean, Student Affairs



Dr. Manjunatha R C
Professor and Assistant
Controller of Examinations

Celebrating Academic Leadership

We are proud to announce the well-deserved promotions of Dr. Ravi J, now serving as Dean, Student Affairs, and Dr. Manjunatha R C, elevated to Professor and Assistant Controller of Examinations. Both have demonstrated exceptional dedication to education, mentorship, and institutional growth. Their leadership and vision have inspired students and colleagues alike. As they take on these new responsibilities, we look forward to the continued excellence they will bring to our academic community.

DEPARTMENTAL ACHIEVEMENTS



Securing the rally trophy in the college competition INTERACT-2025 was an incredible experience. After days of planning, practice, and teamwork, our efforts were rewarded with a thrilling win. The energy of the race, the sound of engines, and the cheers from our college mates fueled our performance. Finishing first brought a wave of pride and satisfaction, highlighting our dedication, coordination, and passion for the sport.

Winning the VTU fest rally trophy is a truly monumental achievement for the ECE department, showcasing their exceptional talent and teamwork on a grand stage. Under the outstanding guidance and support of lecturers, also the spirit of the students of ECE, the team not only triumphed over fierce competition from all other departments but also did so with remarkable style.

FACULTY'S ACHIEVEMENTS

Esteemed faculty members continue to achieve new heights, earning recognition and significantly contributing to their fields. Dedication to research, innovation, and teaching inspires students and enhances the institution's reputation. Here's a look at some notable accomplishments from Jan 2025

SL NO.	NAME	MONTH OF ACHIEVEMENT	ACHIEVEMENT'S
1.	 Dr. Madhavi Mallam	MAY , 2025	Awarded to Madhavi Mallam Ma'am for securing a Best Paper Award at the ICETCES 2025 conference. It acknowledges their top-tier research and presentation skills during the event.
2.	 Prof. B C Divakar	MAY , 2025	• Awarded Best Paper at Jeppiaar Institute of Technology's ICETCES 2025 for research on "IOT Based Greenhouse Management & Rain Water Harvesting System (GAT)" • Recognized for valuable and high-quality contribution in developing comprehensive video courses for "Control System (BEC403)" on the LearnYHive platform.
3.	 Prof. Seema Srinivas	APRIL,2025	• Successfully completed Innovation Ambassador (Foundation Level) training conducted by MoE's Innovation Cell & AICTE, covering 16 sessions (30 contact hours) in 2024-25. • Received a Best Paper Award at the ICETCES 2025 conference, recognizing their exceptional paper. The certificate validates their innovative research and successful presentation at the two-day event.

FACULTY'S ACHIEVEMENTS

SL NO.	NAME	MONTH OF ACHIEVEMENT	ACHIEVEMENT'S
4.	 Prof. Sushma Sattigeri	JUNE,2025	Successfully completed Level 1 of the India Semiconductor Workforce Development Program (Samsung, IISc, Synopsys) with 88% marks, gaining practical knowledge in semiconductor device technology, CAD tools, and TCAD-based simulation workflows.
5.	 Prof. Kruthik Chand D C	JUNE,2025	Successfully completed Level 1 of the India Semiconductor Workforce Development Program (Samsung, IISc, Synopsys) with 84% marks, gaining practical knowledge in semiconductor device technology, CAD tools, and TCAD-based simulation workflows.
6.	 Prof. Shubha GN	JUNE,2025	Successfully completed Level 1 of the India Semiconductor Workforce Development Program (Samsung, IISc, Synopsys) with 82% marks, gaining practical knowledge in semiconductor device technology, CAD tools, and TCAD-based simulation workflows.
7.	 Prof. Keerthy N	JUNE,2025	Successfully completed Level 1 of the India Semiconductor Workforce Development Program (Samsung, IISc, Synopsys) with 80% marks, gaining practical knowledge in semiconductor device technology, CAD tools, and TCAD-based simulation workflows.

FACULTY'S ACHIEVEMENTS

SL NO.	NAME	MONTH OF ACHIEVEMENT	ACHIEVEMENT'S
8.	 Prof. Renuka	JUNE,2025	Successfully completed Level 1 of the India Semiconductor Workforce Development Program (Samsung, IISc, Synopsys) gaining practical knowledge in semiconductor device technology, CAD tools, and TCAD-based simulation workflows.
9.	 Prof. Archana B K	JUNE,2025	- Completed the 40-hour Faculty Development Programme on QT-03 Basics of Quantum Programming (May-June 2025), organized by Electronics & ICT Academies and endorsed by MeitY/AICTE/UGC, demonstrating Excellent performance and commitment to Quantum Programming. - participated in a hands-on workshop on Semiconductor Fabrication & Characterization organized by the Centre for Nano Science and Engineering (CeNSE) at the Indian Institute of Science (IISc), Bengaluru.
IO.	 Dr. Manjunatha R C	MAY , 2025	Dr.Manjunath R.C for secured the Best Paper Award at the ICETCES 2025 conference. It highlights their significant research contribution presented during the two-day event.

ECE ACHIEVERS (BATCH 2021-25)



RANK 1
ROHITH D R



RANK 2
RUCHITHA S



RANK 3
AKSHATHA S SHASTRY

ECE ACHIEVERS (BATCH 2021-25)

RANK 4
SUCHITHRA R



RANK 5
BHARATH M



RANK 6
DEEPTHI M K



ECE ACHIEVERS (BATCH 2021-25)



RANK 7
MANASA K R



RANK 8
DHANYA GANESH HEGDE



RANK 9
SWAPNA K T

ECE ACHIEVERS (BATCH 2021-25)

RANK 10
DEEKSHA S



BATCH (2021-2025)

A SECTION



B SECTION



C SECTION



PUBLICATIONS

S. No	Name of the Author(s)	Title of the Paper	Details of Conference
1.	Dr. Shashank Kumar Dubey	Analysis of AlGa _N /Ga _N -Based HEMT with 3-Step Gate Field Plate for High Power Applications	2024 IEEE International Conference of Electron Devices Society Kolkata Chapter (EDKCON), Kolkata, India, 2024, pp. 241-245, doi: 10.1109/EDKCON62339.2024.10870612.
2.	Dr. Sangeeta K Siri	FPGA Implementation of Exudates detection in Fundus images through machine learning	2024 Fourth International Conference on Multimedia Processing, Communication & Information Technology (MPCIT), Shivamogga, India, 2024, pp. 29-34, doi: 10.1109/MPCIT62449.2024.10892646
3.	Dr. Parvathy Thampi M.S.	Smart Assistance Device for the Visually Challenged: Integrating GPS Technology and Emergency Support Features with RTOS	2024 International Conference on Signal Processing, Computation, Electronics, Power and Telecommunication(IconSCEPT)
4.	Dr. Parvathy Thampi M.S.	Serverless Cloud Computing : Navigating challenges and exploring future opportunities	2024 2nd International conference on Advancements and key challenges in Green energy and computing(AKGEC)
5.	Prof. Sushma K Sattigeri	Predicting PM _{2.5} Concentrations in Bengaluru Using Ensemble Machine Learning Models and Explainable AI Techniques	2024 8th International Conference on Computational System and Information Technology for Sustainable Solutions (CSITSS)
6.	Dr. Shashank Kumar Dubey	Investigation of FinFET in terms of Device Design, Performance, and its Challenges	Investigation of FinFET in terms of Device Design, Performance, and its Challenges

PUBLICATIONS

S. No	Name of the Author(s)	Title of the Paper	Details of Conference
7.	Dr. Madhavi Mallam (Book)	COMPUTER ORGANIZATION AND ASSEMBLY LANGUAGE PROGRAMMING Kindle Edition	<i>by Jami Venkata Suman Dr. (Author), Madhav Prabhu Mr. (Author), Kalisetti Purushotham Prasad Dr. (Author), Madhavi Mallam Dr. (Author). Publisher : GCS PUBLISHERS; 1st edition (19 February 2025)</i>
8.	Dr. Shashank Kumar Dubey	AI-integrated photonic crystal fiber-based devices	<i>Book: Intelligent Photonics Systems, Publisher: CRC Press, Taylor & Francis, 1st Edition, Pages 38</i>
9.	Dr. Shashank Kumar Dubey	Heterojunction Concept and Technology for FET Developments	2024 International Conference on Signal Processing, Computation, Electronics, Power and Telecommunication(IConSCEPT)

MOU'S

GAT-YOUTH FOR SEVA



The Memorandum of Understanding (MoU) signed between Global Academy of Technology (GAT), an autonomous technical institution in Bengaluru, and Youth for Seva (YFS), a nation-wide volunteering movement, outlines a strategic partnership aimed at promoting volunteerism, social responsibility, and community service among students. This collaboration seeks to create meaningful opportunities for students to engage in community development through structured volunteering, internships, and knowledge exchange. GAT, represented by its Department of Electronics and Communication Engineering, will act as a knowledge partner and provide academic, infrastructural, and mentorship support. It will facilitate the formation of a Youth for Seva student forum or club, appoint faculty mentors, and ensure active student involvement in volunteer activities throughout the academic year.

The MoU mandates a minimum of 50 student volunteers to participate in YFS-led initiatives, and at least 80 students each year are expected to complete a one-month full-time internship under YFS. These activities focus on critical areas such as Health, Education, Livelihood, and Environment. YFS will host student volunteers, organize intervention programs, and provide expert mentoring to help students participate in skill development and community service initiatives. The partnership also includes joint publications of research articles, papers, and educational resources, along with mutual access to infrastructure like seminar halls and classrooms for organizing sessions, training, and events.

MOU'S



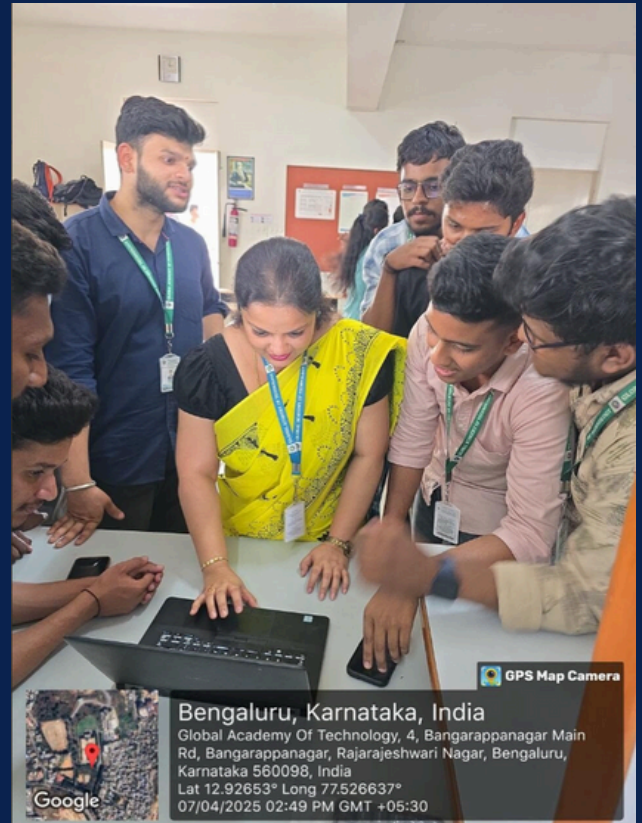
Furthermore, the agreement clarifies that there are no financial obligations on either side unless explicitly agreed upon in writing. Intellectual property rights remain with the respective parties, and neither party can use the other's name, credit, or resources without prior written consent. Both institutions operate as independent entities under this MoU, without forming a legal partnership. The MoU is valid for one year from the date of signing, with an option for renewal based on mutual interest and performance. It may be terminated by either party with 30 days' written notice. Any disputes arising from the MoU will be resolved through arbitration under the Indian Arbitration Act, with proceedings held at the District Headquarters of the first party.

Overall, this MoU represents a mutual commitment to fostering civic engagement among youth and leveraging educational resources to drive social change through volunteering and community-oriented programs.

PATENTS

TITLE OF INVENTION	FACULTY NAMES	GRANT STATUS	GRANT DATE
AI - Driven Dynamic Spectrum Allocation Modem	Dr. Madhavi Mallam, Dr. Anitha Satyanarayana Sastry, Dr. Shazia Sultana, Dr. Parvathy Thampi Mooloor Sahridayan, Dr. Leelavathi Hosakere Puttaswamy, Mrs. Rashmi Kadamuddi Thimmaiah, Dr. Shantala Shettar	Granted	2/27/2025
Real time-edge Computing Framework for AI-driven IOT Devices	Dr. Madhavi Mallam	Published	1/17/2025
A Content Aware Machine Learning Framework for Automation System	Dr. Madhavi Mallam	Published	1/17/2025
System and Method for reconfigurable FPGA based edge AI processor for IoT application	B C Divakara, Dr. Seema Srinivas, Sushma K Sattigeri, Dr. Preethi Sharma K, Dr. Shashank Kumar Dubey, Renuka B jiddagi	Published	3/17/2025

WORKSHOPS AND EXPO'S



JAVA-EXPO

APRIL, 2025

The Department of Electronics and Communication Engineering (ECE) at Global Academy of Technology, Bengaluru, recently hosted an exceptional event, the "JAVA EXPO", centered around Java programming. This unique initiative aimed to showcase and enhance the programming capabilities of students, with a particular focus on Java, one of the most widely used programming languages in the world. The event was designed not only to demonstrate students' technical prowess but also to provide them with practical, hands-on experience in applying their knowledge to real-world scenarios.

The expo kicked off with an inspiring inauguration ceremony, where the Head of the Department (HOD) and the event coordinator shared their insights on the importance of Java in today's technological landscape. They emphasized how the program would help students deepen their understanding of Java technologies and gain exposure to a variety of real-time applications. Their encouraging words urged students to fully engage with the event and showcase their skills, highlighting the value of practical application in the field of engineering.

WORKSHOPS AND EXPO'S



WORKSHOP ON STM-32

APRIL 2025

The Department of Electronics and Communication Engineering at Global Academy of Technology, Bengaluru, successfully organized a comprehensive six-day Embedded Systems Training Program titled “C Programming with STM-32 Microcontroller”, held from 25th to 30th April 2025. Designed to bridge the gap between theoretical knowledge and industry practice, the program offered an immersive experience in embedded development using tools like STM32Cube IDE, CANKing 7, Kvaser Device Drivers, Proteus, and Embedded C. Aimed at equipping students with both foundational and advanced skills, the sessions covered everything from the basics of embedded systems and GPIO configuration to memory management, sensor integration, and dynamic memory allocation. Each day featured a blend of theory and practical application, allowing participants to work directly with STM32 microcontrollers, implement C programs, simulate circuits, and interact with sensors and comparators in real time. Notable topics included bitwise operations, stacks and queues, function modularity, string manipulation, and ADC-based hardware control. Expert guidance was provided throughout by dedicated instructors who ensured individual attention and engagement, even when participants faced challenges with programming fundamentals.

The sessions on advanced memory concepts, including `malloc()`, `calloc()`, and `realloc()`, as well as data structures like structures, unions, enums, and linked lists, provided students with a comprehensive understanding of memory optimization in embedded systems. Participant feedback was overwhelmingly positive, praising the clarity of instruction, hands-on learning, and real-world relevance. Suggestions for future improvements included more preparatory materials, use of visual aids such as flowcharts and diagrams, and extended Q&A sessions. The program concluded with participants confidently applying their knowledge to hardware-based projects, making it a highly impactful learning experience. This initiative underscored Global Academy of Technology's commitment to fostering industry-ready skills and technical excellence in the field of embedded systems.

WORKSHOPS AND EXPO'S



TINKERCAD, COMSOL & MULTISIM TOOLS WORKSHOP

JUNE, 2025

The Department of Electronics and Communication Engineering at Global Academy of Technology, Bengaluru, organized an insightful and hands-on Three-Day Student Enrichment Programme from 5th to 7th June 2025, designed to provide first-year engineering students with foundational exposure to industry-standard tools such as TinkerCAD, COMSOL Multiphysics, and Multisim. This initiative was conducted in collaboration with the Maharaja Institute of Technology, Thandavapura, Mysore, Karnataka, and witnessed enthusiastic participation from 50 second-semester ECE students.

The core objective of the programme was to bridge the gap between academic learning and practical industry requirements by familiarizing students with real-time simulation and design tools. These tools play a crucial role in circuit simulation, modeling, and system analysis across various fields of electronics and electrical engineering. By incorporating hands-on sessions, the event ensured that students moved beyond theoretical knowledge to experience the working and application of these tools in real-world engineering scenarios.

TINKERCAD, COMSOL & MULTISIM TOOLS WORKSHOP

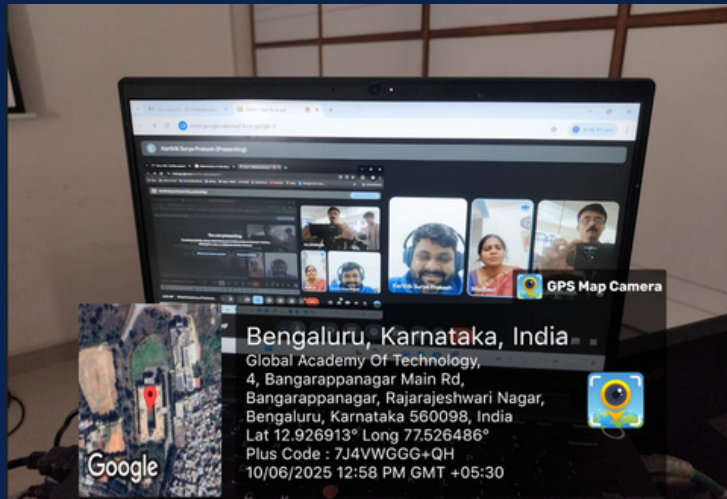


The programme was enriched by the presence and expertise of a distinguished panel of resource persons, including Dr. Madhavi Mallam, Prof. Divakara B.C, Dr. Seema Srinivas, Dr. Shashank Kumar Dubey, Prof. Sushma K. Sattigeri, and Prof. K. H. Yogananda Raj Urs. Each session was carefully crafted to engage students through practical demonstrations, interactive problem-solving, and real-time simulations, thus fostering a deeper understanding of the subject matter.

Students had the opportunity to work directly with the software interfaces, simulate electronic circuits using Multisim, perform real-time 3D circuit modeling in TinkerCAD, and explore complex multiphysics environments using COMSOL. This blend of theoretical instruction and experiential learning significantly enhanced their confidence and competence in using engineering tools effectively. The faculty members shared not just their technical expertise but also valuable industry insights, career advice, and problem-solving approaches, making the program intellectually stimulating and professionally enriching.

The event concluded with overwhelmingly positive feedback from the students, many of whom expressed that the program had opened their eyes to the practical dimensions of engineering they had yet to explore in the classroom. This successful enrichment programme stands as a testament to Global Academy of Technology's continued dedication to fostering technical excellence and holistic development among budding engineers. By embedding industry-relevant skills early in the academic journey, such initiatives prepare students to meet the demands of a rapidly evolving technological landscape.

EXPERT TALK'S ON FUTURE PROSPECTS OF DATA AND AI



Our department, Electronics and Communication Engineering organized a guest lecture on "Future Prospects of Data and AI" on June 10, 2025. The lecture, held in the 414 (CCN Lab) for 78 first-year ECE students, was coordinated by Prof. B.C. Divakara, Dr. Shazia Sulthana, and Prof. Shubha G.N.

The primary objectives were to explore emerging trends in data science and AI, equip students with knowledge of algorithms and tools, and prepare them for various roles in the field. Mr. Karthik Surya Prakash, a Senior Data Engineer from Ofgem, London, delivered the session, covering the fundamentals of AI and data science, and emphasizing "Responsible AI."

The talk also included an overview of VLSI technology, modern chip design trends, and career paths in the semiconductor industry, encouraging students to pursue internships and hands-on projects. The program's outcome was a comprehensive understanding of how data and AI are reshaping sectors, with students gaining clarity on career opportunities and the importance of ethical considerations. Prof. Shazia Sulthana delivered the vote of thanks, and feedback from students indicated that the session was highly informative and motivational. The faculty coordinators for the event were Prof. B.C. Divakara, Dr. Shashank Kumar Dubey, and Prof. Kavya M.

GLOBAL ACADEMY OF TECHNOLOGY
AUTONOMOUS INSTITUTE, AFFILIATED TO VTU, BELAGAVI

Department of Electronics and Communication Engineering

Tech Connect Club IEEE ComSoc IEEE Bangalore Section

"Expert talk!"
10th June 2025
At 12:00 PM (IST)
Mode: Online

By Mr. Karthik Surya Prakash
MSc Business Analytics
London, UK
Senior Data Engineer, Ofgem

Expert talk on
Future prospects of
Data and AI

Dr. Nagamani Nagaraja Chief of Strategy & Systems
Dr. H B Balakrishna Principal, GAT
Dr. Madhavi Mallam HOD, Department of ECE

Faculty Coordinators
Prof. B.C. Divakara
Dr. Shazia Sulthana
Prof. Shubha G.N.

Student Coordinators
Mr. Anshu Srinivas
Mr. Dhanush F G

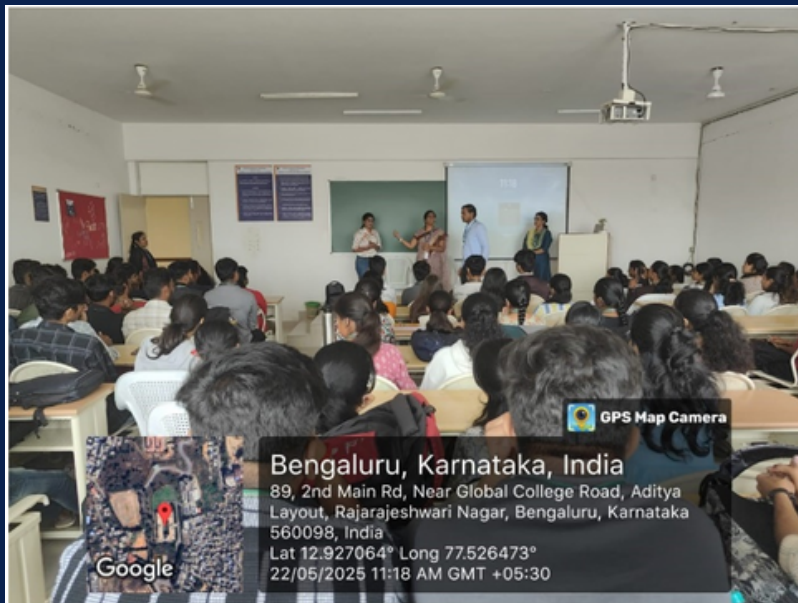
EXPERT TALK'S ON VERILOG, VLSI & BEYOND: EXPLORING APPLICATIONS AND CARRER TRENDS



The Department of Electronics and Communication Engineering at Global Academy of Technology, in collaboration with the Tech Connect Club, IEEE ComSoc, and the IEEE Bangalore Section, hosted a highly informative expert talk on "Verilog, VLSI & Beyond: Exploring Applications and Career Trends." featured Mr. Harish Kumar V, a distinguished Senior Lead Engineer from Qualcomm India Pvt Ltd, as the guest speaker. The talk delved into the intricacies of Verilog and Very Large Scale Integration (VLSI), providing students with a comprehensive understanding of their applications and the dynamic career landscape they offer.

The session, which was a result of the collective efforts of the institution's leadership, was well-attended and provided a platform for students to gain valuable insights from an industry veteran. The initiative was strongly supported by Principal Dr. H.B. Balakrishna and Department Head Dr. Madhavi Mallam, whose commitment to providing students with practical, industry-relevant knowledge was evident. Dr. Nagamani Nagaraja, the Chief of Strategy and Systems, also played a crucial role in facilitating the event. The seamless execution of the talk was thanks to the dedicated efforts of the faculty coordinators, Prof. B.C. Divakara, Dr. Seema Srinivas, and Prof. Renuka B. Jiddagi, and the student coordinators, Mr. Anshu Srinivas and Mr. Dhanush F.G. The expert talk served as a significant learning experience, enriching the students' academic journey and preparing them for the challenges and opportunities in the competitive fields of VLSI and semiconductor design.

EXPERT TALK'S ON WHY VLSI MATTERS: UNLOCKING CAREERS AND CIRCUIT DESIGN



GLOBAL ACADEMY OF TECHNOLOGY
AUTONOMOUS INSTITUTE, AFFILIATED TO VTU, BELAGAVI
Department of Electronics and Communication Engineering

Tech Connect Club
IEEE ComSoc
IEEE Communications Society
IEEE
BANGALORE SECTION

"Expert talk"!
22nd May 2025
At 11:00 AM (IST)
Venue: Room No. 419A

By Ms. Sharanya Shankar
Senior ASIC Design Engineer,
Industry: Semiconductor

Expert talk on
"Why VLSI Matters: Unlocking
Careers in Chip and Circuit Design"

Dr. Nagamani Nagaraja
Chief of Strategy & Systems
Dr. Balakrishna H B
Principal
Dr. Madhavi Mallam
HOD, Department of ECE

Faculty Coordinators
Prof. B C Divakara
Dr. Shashank Kumar Dubey
Prof. Kavya M
Student Coordinators
Mr. Dhanush F G
Ms. Druthi A N
Mr. Shashank M

The Department of Electronics & Communication Engineering at Global Academy of Technology, an autonomous institute in Bengaluru, organized a guest lecture on "Why VLSI Matters: Unlocking Careers in Chip and Circuit Design" on May 22, 2025. The event, was attended by 161 third-year ECE students. Coordinated by Prof. B.C. Divakara, Dr. Shashank Kumar Dubey, and Prof. Kavya M., the program aimed to showcase the foundational role of VLSI in various key sectors and inform students about the skills, tools, and career paths within the field. Mrs. Sharanya Shankar, a Senior ASIC Design Engineer from Taiwan Semiconductor, delivered the lecture. She introduced the fundamentals of VLSI, discussed modern chip design trends, and explored its applications in mobile devices, IoT, and AI. The speaker also provided an overview of essential design tools and the skill sets required for success, encouraging students to gain hands-on experience through internships and projects. The session concluded with a vote of thanks from Prof. Kavya M., and the overall feedback from participants was very positive, with many expressing that the talk was informative and motivated them to explore the field of chip design.

INDUSTRIAL VISITS

INDUSTRIAL VISIT TO MASTER CONTROL FACILITY (MCF), ISRO, HASSAN



INSIDE ISRO'S MASTER CONTROL FACILITY, HASSAN

On 16th December 2024, the 7th-semester ECE students of Global Academy of Technology embarked on an industrial visit to ISRO's Master Control Facility (MCF), Hassan. Known as the nerve centre for India's geostationary and geosynchronous satellites, MCF plays a vital role in controlling and monitoring the INSAT, GSAT, Kalpana, and IRNSS series.

The visit began with an orientation film, tracing India's journey in satellite operations. This was followed by a guided tour of the antenna garden, where massive 11–13 metre parabolic dishes stood as silent sentinels, communicating with spacecraft 36,000 km above Earth. Engineers explained how different antennas handle telemetry, tracking, and ranging based on mission requirements and signal frequency.

Inside the main control room, students observed how satellite health is continuously tracked through TT&C (Telemetry, Tracking & Command) systems. They learned about orbit-raising maneuvers after launch, station-keeping burns to maintain position, and eclipse management during seasonal sun-shadow events. Real mission examples illustrated how quick decisions and precision commands keep satellites operational.

The interaction sessions with ISRO scientists were equally enriching. Students gained clarity on orbital mechanics, RF communication, and payload operations, while also discovering career opportunities in spacecraft control, signal processing, and systems engineering.

INDUSTRIAL VISIT TO MASTER CONTROL FACILITY (MCF), ISRO, HASSAN



By the end of the visit, students had a clearer picture of how textbook concepts in antennas, communication systems, and control theory are applied in real-world space missions. The experience left them inspired to contribute to India's growing space technology landscape.

The team expresses gratitude to ISRO MCF officials and faculty coordinators – Mr. Divakar B.C, Dr. Manjunatha R.C, Dr. Siddalingesh Bandi, Mrs. Bindu K, and Dr. Seema Srinivas – for making this educational and motivating visit possible.

INDUSTRIAL VISITS

EXPLORING THE COSMOS – A VISIT TO THE RADIO ASTRONOMY CENTRE, OOTY



On 16th January 2025, the students of our department set out on a journey that promised to bridge the gap between textbooks and the mysteries of the cosmos. Their destination – the Radio Astronomy Centre (RAC) in Udhagamandalam, Tamil Nadu – is home to one of India's proudest scientific achievements, the Ooty Radio Telescope (ORT).

The RAC operates under the National Centre for Radio Astrophysics (NCRA), part of the prestigious Tata Institute of Fundamental Research (TIFR). Since its inauguration in 1970, the ORT has been a cornerstone of India's radio astronomy research, enabling scientists to explore celestial phenomena far beyond the reach of optical telescopes.

A MARVEL OF INDIGENOUS ENGINEERING

Standing at an impressive 530 meters in length and 30 meters in width, the ORT is a cylindrical parabolic antenna unlike any other in the world. Built entirely with indigenous technology, its construction in the late 1960s was a monumental achievement for Indian science and engineering. Students were fascinated to learn that its reflecting surface is composed of 1,100 thin stainless-steel wires, complemented by an array of 1,056 half-wave dipoles that capture faint cosmic signals from deep space.

During the guided tour, the RAC team explained the concept of phased-array systems, which allow the telescope to electronically steer its "view" without physically moving the massive structure. This technology not only enhances sensitivity but also enables the ORT to observe multiple regions of the sky with remarkable precision.

A VISIT TO THE RADIO ASTRONOMY CENTRE, OOTY



FROM ORT TO OWFA – EMBRACING MODERN TECHNOLOGY

A highlight of the visit was learning about the ongoing transition from the ORT to the Ooty Wide Field Array (OWFA). This upgrade, developed in collaboration with the Raman Research Institute (RRI), significantly improves the telescope's bandwidth, field-of-view, and data-handling capacity through an advanced digital back-end system.

The OWFA project demonstrates how legacy scientific infrastructure can be revitalized with modern engineering solutions, ensuring its relevance for cutting-edge research in pulsar studies, 21 cm intensity mapping, and large-scale cosmic surveys.

The trip concluded with a renewed sense of curiosity and motivation among the students. They left Ooty not only with notebooks full of technical details but also with a deep appreciation for India's contributions to space science and radio astronomy.

Such industrial visits play a vital role in shaping the next generation of engineers and researchers, reminding them that innovation is as much about perseverance and teamwork as it is about technology.

The students and faculty extend their heartfelt thanks to Mr. Divakar B.C, Dr. Leelavathi H.P, Dr. Siddalingesh Bandi, and Mrs. Bindu K for their guidance, and to the dedicated staff of the Radio Astronomy Centre for their hospitality and willingness to share their knowledge. This visit will remain a memorable milestone in the academic journey of every participant.

INDUSTRIAL VISITS

INDUSTRIAL VISIT TO GRKMS PRIVATE LIMITED – E-WASTE MANAGEMENT EXCELLENCE



On 25th January 2025, the students of our department, Electronics and Communication Engineering (7th Semester) from Global Academy of Technology visited GRKMS Private Limited, Dabbaspeta, Bengaluru – a leading company in e-waste management. The visit aimed to provide students with hands-on exposure to sustainable recycling practices, safety protocols, and the environmental significance of responsible e-waste disposal.

The day began with a warm welcome from GRKMS representatives, followed by an insightful briefing on the company's mission, vision, and eco-conscious operations. Students explored various stages of e-waste processing, from collection and dismantling to advanced recycling techniques.

During the plant tour, they witnessed cutting-edge equipment in action:

- Dedusting & Separation Systems for material classification.
- Hard Disk Cutter ensuring data security before recycling.
- Cartridge Toner Cleaning Machine for safe toner removal.
- Cable/Wire Stripping Machine to recover valuable metals.
- De-soldering Machines for component separation.
- Shredding & Granular Disposal Units for size reduction and processing.
- Tubelight Crushing Machine for safe disposal of hazardous materials.

INDUSTRIAL VISIT TO GRKMS PRIVATE LIMITED – E-WASTE MANAGEMENT EXCELLENCE



Industrial experts explained the challenges of e-waste management and showcased innovative solutions that balance environmental protection with economic recovery. Students also explored storage sections for sorted plastics, metals, stainless steel, and aluminum.

The visit fostered a deep appreciation for sustainable waste management and highlighted the role of technology in environmental conservation. Students left with enhanced awareness about the environmental hazards of improper e-waste disposal and the importance of recycling for a cleaner, greener future.

The department extends heartfelt thanks to Mr. Divakar B.C, Dr. Seema Srinivas, and Mrs. Bindu K for their guidance, and to the GRKMS team for their hospitality and knowledge sharing. This industrial visit was not only educational but also an inspiring reminder that technological progress must go hand-in-hand with environmental responsibility.

INDUSTRIAL VISITS

BRIDGING THEORY AND PRACTICE – A VISIT TO SKANRAY TECHNOLOGIES & LAHARI LAB



On 10th February 2025, students embarked on an insightful industrial visit to Skanray Technologies and Lahari Lab (Advanced Electronic Test Facility) in Mysuru. The objective was to expose budding engineers to real-world applications in medical equipment manufacturing and advanced electronic testing.

Skanray Technologies, a global leader in medical devices, showcased its innovations in high-frequency X-ray imaging systems, patient monitoring devices, and other healthcare solutions. Students observed the intricate manufacturing processes and learned how stringent quality control and regulatory compliance ensure patient safety and product reliability.

The visit also included a tour of Lahari Lab, a state-of-the-art facility specializing in advanced electronic testing. Here, students witnessed testing procedures for various electronic circuits and components, gaining insights into compliance testing and industry standards.

Interactive sessions with experts enriched the experience, clarifying the importance of precision, safety, and innovation in both medical and electronic domains. The visit emphasized the relevance of classroom learning to industrial applications, giving students a clear picture of career opportunities in these fields.

By the end of the day, students walked away not just with technical knowledge but also with an appreciation for the role of quality assurance in shaping reliable and safe products. This hands-on exposure will undoubtedly inspire them to strive for excellence in their future careers.

INDUSTRIAL VISITS

INDUSTRIAL VISIT TO THE CENTRAL ELECTROCHEMICAL RESEARCH INSTITUTE (CECRI)



APRIL, 2025

The Department of Electronics and Communication Engineering at Global Academy of Technology, Bengaluru, organized an enriching two-day industrial visit to the Central Electrochemical Research Institute (CECRI), Karaikudi, Tamil Nadu, on 25th and 26th April 2025. This visit was specially arranged for 4th and 6th semester ECE students to gain practical insights into advanced topics such as storage devices, nanomaterials, biosensors, high-end microcontrollers, and the application of AI & ML in sensor technologies. The initiative was coordinated by Dr. Anitha S Sastry and Dr. Anitharaj N, who accompanied the students throughout the visit. CECRI, a premier CSIR research laboratory, was established in 1948 and has been at the forefront of interdisciplinary research in areas like materials science, MEMS/NEMS, photonics, biotechnology, and electrochemical technologies.

The institute collaborates extensively with national and international agencies and industries, offering cutting-edge solutions and consultancy in corrosion science, sensor technology, battery development, and more. During the visit, students were introduced to various ongoing research projects, including Corrosion and Materials Protection, where they explored biological corrosion, cathodic protection, coatings, and failure analysis.

INDUSTRIAL VISIT TO THE CENTRAL ELECTROCHEMICAL RESEARCH INSTITUTE (CECRI)



Another major area was Electrochemical Power Sources, highlighting the importance of batteries in sustainable development, electric vehicles, and clean energy systems. The exposure provided a deeper understanding of how research contributes to real-world industrial applications and the transition to green technologies. Students found the visit highly informative and transformative, especially in enhancing their understanding of micro and nano-fabrication technologies, as well as characterization tools used in modern electrochemical research.

The institute's commitment to innovation, industrial collaboration, and knowledge dissemination through national and international conferences further inspired students to pursue careers in R&D. The visit concluded with heartfelt appreciation for the organizing faculty, with students expressing gratitude for the opportunity to witness state-of-the-art research infrastructure and interact with leading scientists. Student Coordinator Amulya (1GA22EC009), along with faculty coordinators Dr. Anitha S Sastry and Dr. Anitharaj N, ensured smooth execution of the visit under the guidance of Dr. Madhavi M, Head of the Department (ECE). The experience stands out as a pivotal step in bridging academic learning with industrial exposure, paving the way for future innovations and career development.

JIT CONFERENCE



The Jeppiaar Institute of Technology, with its Department of Information Technology at the helm, successfully hosted the International Conference on Emerging Trends in Computing and Engineering Systems (ICETCES 2025) on May 9th and 10th, 2025. This event provided a dynamic platform for researchers, academicians, and industry professionals to engage in spirited discussions and present their latest findings across three specialized tracks: Computing, AI and Cyber Security; Embedded Systems, VLSI, Smart Sensors and Wireless Networks; and Energy Efficient & Sustainable Engineering. The conference proved to be a resounding success, fostering a collaborative environment that encouraged the exchange of innovative ideas and highlighted solutions for the next generation of technological challenges.

In a particularly noteworthy achievement, students from the Electronics and Communication (ECE) department not only participated but also secured a place in the proceedings, showcasing their exceptional talent and research prowess. All accepted papers from the conference, including those of the ECE students, were published with ISBN numbers, marking a significant contribution to the academic community. The success of ICETCES 2025 further solidified Jeppiaar Institute of Technology's reputation as a hub for cutting-edge research and interdisciplinary collaboration, reinforcing its commitment to advancing technology and engineering education. The event's impact extended beyond the two days, leaving participants with fresh perspectives and a stronger network of peers to continue their work in these critical fields. The lively atmosphere of intellectual exchange, complemented by the warm hospitality of the host institution, ensured that ICETCES 2025 was a memorable and highly productive experience for all involved, from the distinguished keynote speakers to the eager young researchers.

SPORTS EVENT: CHAMPION CLASH



The Department of Electronics and Communication Engineering at Global Academy of Technology successfully organized a sports event titled “Champions Clash” on 12th April 2025 (Saturday). The event was coordinated by Prof. Keerthy N and witnessed enthusiastic participation from 80 students across various semesters. Held on campus, the event aimed at promoting physical fitness, teamwork, and a spirit of healthy competition among students. The competitions included Short Pitch Cricket, Throwball, Volleyball, and Tug of War, drawing large student interest and showcasing their athletic talents. The event commenced with an inauguration ceremony attended by faculty members and dignitaries under vibrant outdoor arrangements.

The presence of Dr. H B Balakrishnan (Principal of GAT), Dr. Nagamani Nagaraja (Chief of Strategy & Systems), Dr. Madhavi Mallam (HOD, ECE), and other staff members lent inspiration to the participants. Faculty coordinator Prof. Keerthy N, along with student coordinators Mr. Hemanth G, Mr. Mithun N, and Mr. Mohith BN, ensured smooth execution of the event. The event concluded with felicitation of the winners and runners-up from the cricket tournament, with group photos capturing the joyful moments. In addition to the sports event, Prof. Keerthy N also served as a panel member for a technical seminar conducted for 8th-semester students and contributed to academic excellence by mentoring two final-year projects, both of which were accepted for presentation at an upcoming conference hosted by JIT, Chennai. Overall, the week’s events fostered a perfect blend of sportsmanship and scholarly activity, embodying the holistic development approach embraced by the institution.

POETRY AND ARTWORKS

ಆಗಸ ನಿನ್ನದು:

ಬಾಲ್ಯ ಸವಿದು ಹದಿಹರೆಯಕ್ಕೆ ಬಂದಿರುವೆ
ಬಾಳ ಯಾನ ಶುರುವಾಗಿದೆ, ನಾ ಎಲ್ಲಿರುವೆ!
ನೋಡಲು ಕಾಣುತ್ತಿರುವುದು ಎತ್ತರದ ಆಗಸ
ಮನ ಹೇಳುತ್ತಿದೆ ಆಗಸಕ್ಕೆ ನೀ ಹಾರು ಹಾರು ಹಾರು! ಆಗಸ ನಿನ್ನದು ||೧||

ಇಂದು ಈ ಕ್ಷಣ ತಿರುಗಿ ಬರಲಾರವು, ಇದೇ ಅರಿವು !
ಭ್ರಮೆಯ ಭಾವನೆಗಳು ಮೈಮರೆಸಲು ಬಿಡೆನು ಎಂದು ನಿಶ್ಚಯಿಸಿ ಬಿಡು!
ಗಮನಿಸು, ಮನ ಹೇಳುತ್ತಿದೆ "ಅರಿವೇ ಗುರು" ಎಂದು ಆಗಸಕ್ಕೆ ನೀ ಹಾರು ಹಾರು ಹಾರು! ಆಗಸ ನಿನ್ನದು ||೨||

ಮಾತು, ನಡೆ ವ್ಯಕ್ತಿತ್ವ ರೂಪಿಸುತ್ತದೆ
ವ್ಯಕ್ತಿತ್ವವು ಮನವು ನಗುವಂತಿರಬೇಕು
ಆತುರ, ಅಡಂಬರಗಳ ಒಡನಾಟ ತ್ಯಜಿಸಿಬಿಡು ಮನ ನಗುವಂತೆ ವ್ಯಕ್ತಿತ್ವ ಹೊಂದುವೆ!
ಗಮನಿಸು, ಮನ ಹೇಳುತ್ತಿದೆ "ನಗುತ್ತ" ಆಗಸಕ್ಕೆ ನೀ ಹಾರು ಹಾರು ಹಾರು! ಆಗಸ ನಿನ್ನದು ||೩||

ಜೀವನದಲ್ಲಿ ಮುಂದುವರಿಯುವುದೇ ಸಾಧನೆ
ಸಮಯ ಎಂದಿಗೂ ನಿಲ್ಲದೆ ಮುಂದೆ ಸಾಗುತ್ತದೆ
ಸಮಯದ ಅನುಯಾಯಿಗು!
ಗಮನಿಸು, ಮನ ಹೇಳುತ್ತಿದೆ "ಲವಲವಿಕೆಯಿಂದ" ಆಗಸಕ್ಕೆ ನೀ ಹಾರು ಹಾರು ಹಾರು! ಆಗಸ ನಿನ್ನದು ||೪||

ಗರ್ವ ಅಹಂಕಾರ ಆಲಸ್ಯ ಸೋಲಿನ ಆಕರ್ಷಣೆಗಳು
ಹೋಲಿಕೆ ವಿಡಂಬನೆ ಕೋಪ ಮಾಡದಿರು ಗೆಲುವು ಮದವಾಗದಿರಲು !
ಗಮನಿಸು, ಮನ ಹೇಳುತ್ತಿದೆ "ಭೇದವಿಲ್ಲದೆ" ಆಗಸಕ್ಕೆ ನೀ ಹಾರು ಹಾರು ಹಾರು! ಆಗಸ ನಿನ್ನದು ||೫||

ಜೀವನವಿದು ಸ್ವಚ್ಛಂದದ ಗುರುತು ಮೂಡಿಸಬೇಕು
ಪರಿಸರವ ನೋಡಿ ಅದರ ಕಾಲಕಾಲದ ಮಳೆ ಬೆಳೆ ನಡೆಯ ಕಲಿಯಬೇಕು, ಇದೇ ಜವಾಬ್ದಾರಿ!
ಮನದ ಕುಟುಂಬದ ಹಾರೈಕೆಯೇ ಜವಾಬ್ದಾರಿ ಮರೆಯದಿರು!
ಗಮನಿಸು, ಮನ ಹೇಳುತ್ತಿದೆ "ರಾಜನಂತೆ" ಆಗಸಕ್ಕೆ ನೀ ಹಾರು ಹಾರು ಹಾರು! ಆಗಸ ನಿನ್ನದು ||೬||

ಹೆಣ್ಣನ್ನು ಪ್ರೋಷಿಸುವ ಗೌರವಿಸುವ ಸಮಾಜ ಕಟ್ಟುವುದು ನಿನ್ನ ಮೊದಲ ಆದ್ಯತೆ ಎಂದಿಗೂ !
ಹೆಣ್ಣನ್ನು ಕಾಣುವ ಬಗೆಯೇ ನಿನ್ನ ಗುಣದ ಮಾಪಕ
ಗಮನಿಸು, ಮನ ಹೇಳುತ್ತಿದೆ " ಗುಣವಂತನಾಗಿ " ಆಗಸಕ್ಕೆ ನೀ ಹಾರು ಹಾರು ಹಾರು! ಆಗಸ ನಿನ್ನದು ||೭||

ಹದಿಹರೆಯದಲ್ಲಿ ಅರಿವು, ನಗುವು, ಗುಣವು, ಲವಲವಿಕೆ, ಅಭೇದವು ಕರಗತ ಹೊಂದುವುದೇ ನಮ್ಮದಿಯ ಜೀವನದ ನೆಲೆಯ ಗುಟ್ಟು.
ಗಮನಿಸು, ಮನ ಹೇಳುತ್ತಿದೆ " ಮಾನವನಾಗಿ " ಆಗಸಕ್ಕೆ ನೀ ಹಾರು ಹಾರು ಹಾರು! ಆಗಸ ನಿನ್ನದು

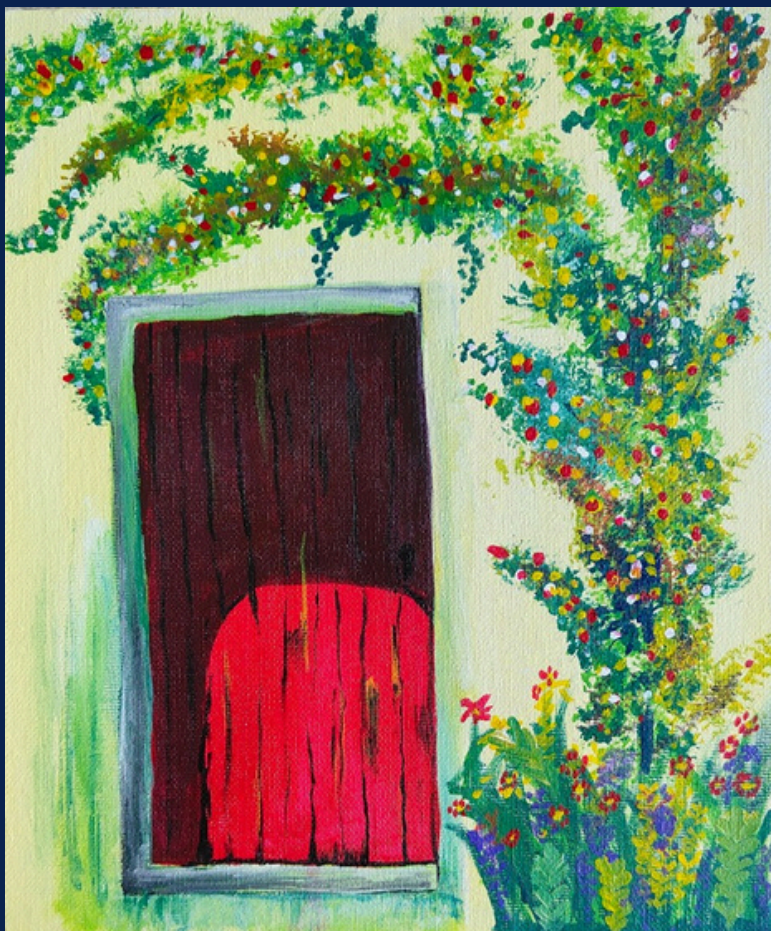
④ಮುದ್ದುನಂದ

YOGANANDA
ASSISSTANT PROFFESOR

POETRY AND ARTWORKS



SHIVANI
7TH SEM



KEERTHY N
ASSISTANT PROFESSOR

THANK YOU