CS GYANBYTES

Department of Computer Science and Engineering Newsletter

Vision

To create competent professionals in Computer Science and Engineering with adequate skills to drive the IT industry

Mission

1. *Impart sound technical knowledge and quest for continuous learning.*
2. *To equip students to furnish Computer Applications for the society through experiential learning and research with professional ethics.*
3. *Encourage team work through inter-disciplinary project and evolve as leaders with social concerns.*

Program Educational Objectives

PEO 1: Excel in profession career by acquiring knowledge in cutting edge technology and contribute to the society as an excellent employee or as an entrepreneur in the field of Computer Science and Engineering

PEO 2: Continuously enhance their knowledge on par with the development in IT industry and pursue higher studies in Computer Science and Engineering

PEO 3: Exhibit professionalism, cultural awareness, team work, ethics, and effective communication skills with their knoledge in solving social and environmental problems by applying computer technology

Sri. R. Leela Shankar Rao
Hon. Secretary

Sri. R. Rajagopal Naidu
President

Sri. T. Neerajakshulu Naidu
Treasurer

Dr. K V A Balaji
CEO, KSGI

At KSIT, We strongly believe in the overall development of our students with adequate social responsibility and sensitivity. I am very happy that the Department of Computer Science and Engineering have been very successful in spotting the talents in our students and harnessing them and enabling our students to learn content beyond the syllabus through experiential learning from various live and ongoing projects that are present in our institution. All their efforts and learning are being showcased in this newsletter "CS-GYANBYTES". I wish the staff and our talented students the very best in both their professional and personal lives.

Dr. Dilip Kumar K
Principal/Director

At KSIT, We offer a professional educational experience through various teaching methodologies. By the time the students are graduated, they will be confidence in facing the society being the professional or the personal life. Life on campus is both enriching and exciting. We have excellent infrastructure offering spacious labs. classrooms, research centers, library, indoor play area, transport and hostel facilities. Broaden your network and enjoy your time in KSIT by participating in Co-curricular activities, which span from Interest groups to clubs, to nurture your creativity and passion. Wishing you all a good luck.

The department has a team of highly experienced, committed and eminent faculty members. All the faculty members are well qualified and competitive enough in preparing the young minds for global competition with enormous support from the head of the department as well the management. Students of the CSE department are highly motivated and ready for IT Industry with hands-on experience in current technologies/programming languages. The department is accredited by NBA for three years (2024-2027).

In VTU results students are getting ranks and are working with reputed companies with higher salary packages. The students are actively participating in Hackathon and other coding contests at the International, National and State level and making their footprints. In the year 2023 Team Pegasus from the CSE department won the Smart India Hackathon competition. Our mission is to inculcate strong theoretical and practical knowledge for continuous learning and prepare students to find Computer solutions for society through research and entrepreneurship with professional ethics, encourage teamwork in inter-disciplines and evolve as leaders with social concerns. The Department of CSE is striving hard towards the goal of providing innovative and quality education with high standards to achieve academic excellence and provides a platform for the students to achieve their career goals. The students of the department are exposed to industry environment and they have high inclination towards entrepreneurship and research. A large number of alumni are pursuing higher studies/research in India as well as abroad in reputed universities. Staff and students are members of Professional bodies like IEEE, CSI, ISTE, BITES and IEI where the faculty members and students are encouraged to publish research papers in reputed journals, participate in Faculty Development Programs and workshops through a well-supported system. Several patents have been filed by the department faculty. The department preserves its achievements and publish its all activities by Bi-annual magazine 'CS-GYANBYTES' Volume 10 Issue 2 is set to release.

-DR. REKHA B VENKATAPUR

HOD

WORKSHOPS AND FDPs ATTENDED

- **Dr. Rekha B Venkatapur** attended the **International Conference on Sustainable Computing and Intelligent Systems** (SCIS 2024) as a **Session Chair** at the **University of Canberra, Australia**, from 09-10th September 2024 (2 Days).She also participated in the **MongoDB Academic Summit** 2024 hosted by MongoDB, Inc on 10th September 2024 (1 Day).

- **Dr. Prasantha H S** served as a **Reviewer** for the 3rd **IEEE CVMI 2024** held at **IIIT Allahabad**, Jhalwa, Prayagraj, UP, from 19-20th October 2024 (2 Days).

- **Dr. Sunita Chalageri**, **Mrs. Shruthi T S**, and **Mrs. Ramya R** attended an FDP on "**Recent Research Trends in Computer Science and Information Technology**" organized by SSET, **Sharda University**, Noida, from 23rd to 27th September 2024 (5 Days).

- **Mr. Somasekhar T** participated in a MOOC Workshop on "**Building a Competitive Edge: A Workshop on Employability Skills through MOOCs**" held at VTU, RC, **Nagarabhavi**, on 10th September 2024 (1 Day).He also attended an FDP on "**VTU Internship Program organized by Rooman Technologies**" at VTU, RC, **Nagarabhavi**, from 2nd to 5th September 2024 (4 Days).

- **Mrs. Swapna S Banasode** participated in an FDP on "**Industry 5.0 – Security Issues in Generative AI**" at **D Y Patil College** of Engineering, Akurdi, from 19th to 23rd August 2024 (5 Days).

- **Dr. Vijayalaxmi Mekali** and **Dr. Sunita Chalageri** were appointed as External Members for the **BOE** of B.Tech Examinations at **Jain University** on 8th and 9th November 2024, respectively.

- **Dr. Sunita Chalageri, Mr. Kumar K, Mrs. Shruthi T S, Mrs. Ramya R, Mrs. Sheba Jebakani,** and **Mr. Swapna S Banasode** attended the FDP on "**Unlocking the Potential of Data Analytics Using Python**" at BIT, Bangalore, from 19th to 21st November 2024 (3 Days).

- **Ms. Namyapriya D** attended the FDP on "**Deep Learning and Image Processing**" at **RRIT**, Bangalore, from 21st to 27th October 2024 (7 Days). She also participated in a Training Programme on "**VTU Consortium e-Resources**" at BGSCET, Bangalore, on 15th October 2024 (1 Day) and the FDP on "Smart Cities and Mobilities" at JIT, Bangalore, from 9th to 10th August 2024 (2 Days).She also attended an FDP on "**Academic and Administrative Audit for NAAC Binary Accreditation**" organized by the Institute of Continuous Learning from 8th to 13th August 2024 (5 Days).

- **Ms. Maddelabhargavi, Mrs. Asha Sattigeri, Mrs. Ropashree S V and Mrs. Kodur Srividy**a attended the FDP on "**Deep Learning and Image Processing**" at **RRIT**, Bangalore, in association with **MEVI Technologies LLP**, from 21st to 27th October 2024 (7 Days).

- **Dr. P. Soubhagyalakshmi** and **Mr. Vishva Kiran R C** participated in the FDP on "**Artificial Intelligence for Computer Vision and Medical Image Processing**" at **EPCET**, Bangalore, from 25th January to 5th February 2025 (10 Days).

- **Mrs. Ramya R** attended the FDP on "**Recent Research Trends in Computer Science and Information Technology**" at **SSET**, **Sharda University**, from 23rd to 27th September 2024 (5 Days).

- **Mr. Kumar K** participated in the FDP on "**Enhancing Pedagogy through Generative AI**" at MSRIT, Bangalore, from 19th to 23rd August 2024 (5 Days).

NPTEL COURSE

- **Dr. Vijayalaxmi Mekali** has secured **Elite+Silver** for the course **Introduction to Machine Learning - IITKGP** during the course duration from Jul to Dec 2024.

- **Sahana D** has secured **Elite+Silver** for the course **Python for Data Science** during the course duration from Jul to Dec 2024.

- **Mokesh G R** has secured **Elite** for the course **The Joy Of Computing Using Python** during the course duration from Jul to Oct 2024.

- **Nagarjun Kumar S** has secured **Elite+Silver** for the course **The Joy Of Computing Using Python** during the course duration from Jul to Oct 2024.

- **P C TEJAS** has secured **Elite+Gold** for the course **The Joy Of Computing Using Python** during the course duration from Jul to Oct 2024.

- **Jeevan M** has secured **Elite** for the course **Programming in Java** during the course duration from Jul to Oct 2024.

- **Shama Shivaraj Shetty** has secured **Elite+Silver** for the course **The Joy Of Computing Using Python** during the course duration from Jul to Oct 2024.

- **Shama Shivaraj Shetty** has secured **Elite+Silver** for the course **Technical English for Engineers** during the course duration from Jul to Oct 2024.

- **Vigasini S** has secured **Elite+Silver** for the course **The Joy Of Computing Using Python** during the course duration from Jul to Oct 2024.

EVENTS CONDUCTED

The Department of Computer Science and Engineering organized a Seminar on **"Cyber Security by Rubixe - 2024"** on 02-07-2024 at College, conducted by **Mr. Ramkumar V** from **Rubixe** for VI A&B, IV C SEC students.

Fig: Cyber Security Seminar

The Department of Computer Science and Engineering organized a Guest Lecture on **"Higher Studies in Abroad"** on 11-07-2024 at College, conducted by **Mr. Tiru** from **IDP Education** for VI Sem students.
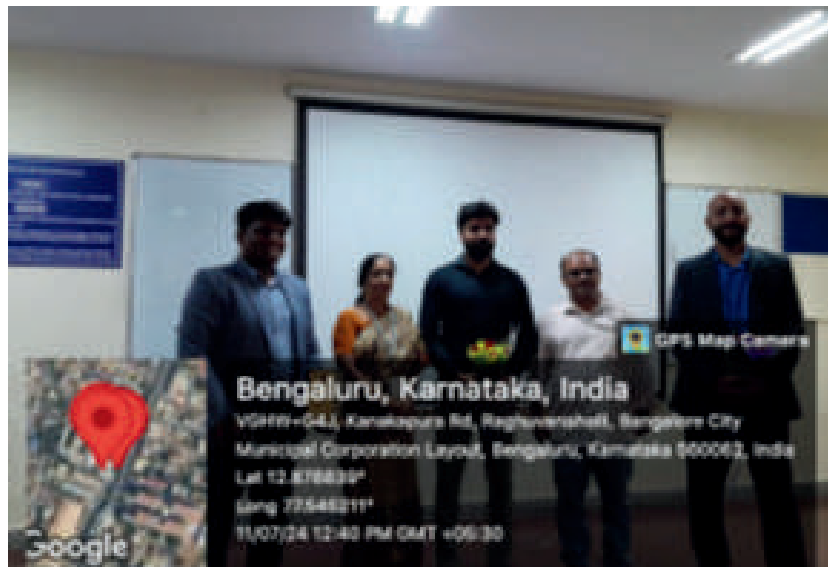
Fig: Guest lecture on Higher Studies in Abroad

- **The Department of Computer Science and Engineering** organized a **Project Exhibition and Competition** on 27-07-2024 at College, conducted by **Mr. Sreenivasa S**, Project Manager, Braking Systems at **Bosch India**, for VI Sem students.

Fig: Project Exhibition and Competition

- **The Department of Computer Science and Engineering** organized an Industrial Visit to the **Infosys Spring Board Summit** on 23-08-2024, with keynotes from **Nandan Nilekani, Chairman of Infosys, Dr. M C Sudhakar, Pramod Verma, and Ms. Shila Nag.**

Fig: Infosys Spring Board Summit

- **The Department of Computer Science and Engineering** organized a Workshop on **"IBM Skill Build on Insights into AI"** on 12-09-2024 at College, conducted by **Mr. Srikanth Nivarhi**, CEO & Founder Director of **Turnln Learning Solutions Pvt. Ltd.**, and **Mr. Raghuraj Singh**, for III Sem students.

Fig: Workshop on IBM Skill Build on Insights into AI

- The Department of **Computer Science and Engineering** organized the **ICT Honeywell Youth Empowerment Program** from 03-09-2024 to 23-09-2024 at KSIT. Conducted by **Syed Kamaran**, the 20-day **Salesforce Development training** equipped 63 students with skills in Salesforce platform development, including **Apex programming, Lightning Components**, and **integration techniques**, along with certification preparation.

Fig: ICT Honeywell Youth Empowerment Program

- **The Department of Computer Science and Engineering** organized a Workshop on **"Hands-on Training on Verilog HDL"** on 19th and 20th Oct 2024 at College, conducted by **Mr. Padmanaban K**, Software Enabling & Optimization Engineer at Intel Technologies India Pvt. Ltd., for III Sem students.

Fig: Workshop on "Hands-on Training on Verilog HDL

- The Department of **Computer Science and Engineering** conducted an **AI Model Training Workshop** on 24-10-2024 at KSIT, led by **Mr. Ravi Prasanna from Unifynow**. The workshop provided 206 students with **hands-on experience in AI and machine learning**, covering key concepts such as **data preparation, model training, and performance evaluation**, along with insights into **real-world applications.**

Fig: AI Model Training Workshop

- **The Department of Computer Science and Engineering** organized a Field Trip to **Namada Chilume, Siddganga Mutt, and Mandaragiri Hills** on 16-11-2024 for III Sem students.

Fig: Field Trip to Mandaragiri Hills

- **The Department of Computer Science and Engineering** organized an Industry Visit to **Xcel Corp**, Bangalore on 23-11-2024 for V Sem students.

Fig: Industry Visit to Xcel Corp

- **The Department of Computer Science and Engineering** organized an Industrial Visit to the **Bengaluru Tech Summit** on 21-11-2024 for V Sem students.

Fig: Industrial Visit to the Bengaluru Tech Summit

- **The Department of Computer Science and Engineering** organized an Industrial Visit to the **Auto EV India 2024 Summit** in Bengaluru on 27-11-2024 for VII Sem students.

Fig: Industrial Visit to the Auto EV India 2024 Summit

ACHIEVEMENTS BY DEPARTMENT

ACHIEVEMENTS BY FACULTY

SESSION CHAIR/PAPER REVIEWER

- **Dr. Rekha B Venkatapur**, Session Chair at the International Conference on **Sustainable Computing and Intelligent Systems (SCIS 2024)** held at the University of Canberra, Australia, from 09th to 10th September 2024.
- **Dr. Prasantha H S**, Reviewer at the 3rd **IEEE CVMI 2024** held at **IIIT Allahabad**, Jhalwa, Prayagraj, UP, from 19th to 20th October 2024.

UGC NET

- The **Computer Science Department** takes immense pride in congratulating **Ms. Roopashree S V** for successfully **clearing the UGC NET** exam in 2024.

ACHIEVEMENTS BY STUDENTS

- **Mini Project Exhibition & Competition – 2024**: **Gagan Shivanna (1KS21CS030)**, **Karthik H N (1KS21CS046)**, **Arthan M Gowda (1KS21CS015)**, and **Aditya V (1KS21CS008)** participated in the event organized by **KSIT** on 27-07-2024 and secured 2nd Place.

- **Mini Project Exhibition & Competition – 2024**: **Gopala Krishna V (1KS21CS031)**, **Akshay V B (1KS21CS011)**, **Dhruthi Umesh S (1KS21CS027)**, and **Gaana S (1KS21CS029)** participated in the event organized by **KSIT** on 27-07-2024 and secured 1st Place.

- **UTKARSH Technical Club: Logeshwaran S (1KS22CS408)**, **Kaushik G V (1KS21CS047)**, **Kiran B S (1KS22CS405)**, **Vanishree (1KS21CS110)**, **Aruna G N (1KS22CS402)**, and **Lakshmeesh M V (1KS22CS406)** participated in the event organized by **DSATM** from 04-07-2024 to 05-07-2024.

- **Tech Tonic 2024: Kavya B Singh** (1KS21CS049) and **Afifa Aysha Bijli** (1KS21CS009) participated in the event organized by **DSATM** from 12-07-2024 to 17-07-2024.

- **Codekala "Decodex": Jayaditya Dev** (1KS23CS059) participated in the event organized by **KSIT, CSD** on 21-11-2024 and secured **2nd Place**.

- **Logic Fiesta** as part of **Innospark**: **Jayaditya Dev** (1KS23CS059) participated in the event organized by **KSIT, CSE** on 27-11-2024 and secured **1st Place**.

- **Logic Fiesta** as part of **Innospark**: **Aryaman Tiwari** (1KS23CS020) participated in the event organized by **KSIT, CSE** on 27-11-2024 and secured **1st Place.**

- **Dodge Arena** as part of **Innospark**: **Raghu J** (1KS23CS119) participated in the event organized by **KSIT, CSE** on 27-11-2024 and secured **1st Place**.

- **Throw Ball**: **Keerthan M** (1KS23CS064), **Monika V** (1KS22CS085), **Prajna Gaonkar** (1KS22CS104), **Nagashree A** (1KS21CS064), **Vijayashree A** (1KS22CS185), and **Dhruthi Umesh S** (1KS21CS027) participated in the event organized by **Jnanavikas Institute of Technology** from 12-12-2024 to 13-12-2024 and secured Runner Up.

- **National Level Inter Collegiate 24 Hrs Hackathon "AVINYA – 2024"**: **Jayaditya Dev (1KS23CS059)** participated in the event organized by **SJCIT, Chikkaballapur** from 29-11-2024 to 30-11-2024.

- **Capture the Flag National Event: Ruby Kumari R (1KS23CS126)** and **Durga Shree M (1KS23CS043)** participated in the event organized by **DSATM**, Bangalore from 04-12-2024 to 06-12-2024.

PUBLICATIONS BY FACULTY

- **Dr. Rekha B Venkatapur** authored a conference paper titled "**A General Comparative Study of Various Video Compression Standards Based on Their Features, Working Mechanism, and Usage Applications**," published as part of the book series Lecture Notes in **Networks and Systems (LNNS, Volume 993)** by Springer, Singapore, and a research paper titled "**Cyber Sentry: A Chatbot Solution for Tackling Cybercrime**," published in the Journal of **Xidian University**, Volume 18, Issue 4, 2024. The conference paper was first published online on 23 August 2024, with a Print **ISBN** of 978-981-97-4726-9 and an Online ISBN of 978-981-97-4727-6.

- **Dr. Rekha B Venkatapur** and **Mr. Somasekhar T** co-authored a research paper titled "**Insights into Air Quality and Mixed Gas Analysis: A Machine Learning and Visualization Approach**," which was published in the Journal of **Xidian University**, Volume 18, Issue 5, 2024. The ISSN number for this journal is 1001-2400.

- **Mr. Somasekhar T** authored a research paper titled "**Predicting Network Security Using Machine Learning**," published in the Journal of **Xidian University**, Volume 18, Issue 4, 2024, which is UGC-approved. The ISSN number for this journal is 1001-2400.

- **Mr. Roopesh Kumar B N** authored a research paper titled "**BlockLottery: A Decentralized Lottery System based on Blockchain Technology**," published in the HTL Journal, Volume 30, Issue 7, 2024. This is a peer-reviewed international journal with an ISSN number of 1006-6748 and an impact factor of 2.7.

RESEARCH ACTIVITIES

- **Open Seminar-1** of **Mrs. M. Shanmugam Shoba** (USN: 1KS19PCS05) was held on **5th July 2024 at 2:00 PM** in the CSE R&D Centre, KSIT. Her research, "**An Enhanced Blockchain Security Mechanism using Ensembled Digital Signature Schemes**," focuses on improving blockchain security. The session was reviewed by **Dr. Rekha B. Venkatapur, Dr. Naveen N. C., and Dr. Deepa S. R.**

- **Open Seminar-1** of **Mr. Raghavendrachar. S** (USN: 1KS19PCS04) took place on the same day at 3:00 PM in the same venue. His research, "**Detection of Nutrition Deficiency in Mulberry Leaves Using Deep Learning Techniques**," applies AI in agriculture. The review panel included **Dr. Rekha B. Venkatapur**, **Dr. Naveen N. C.**, and **Dr. Deepa S. R.**
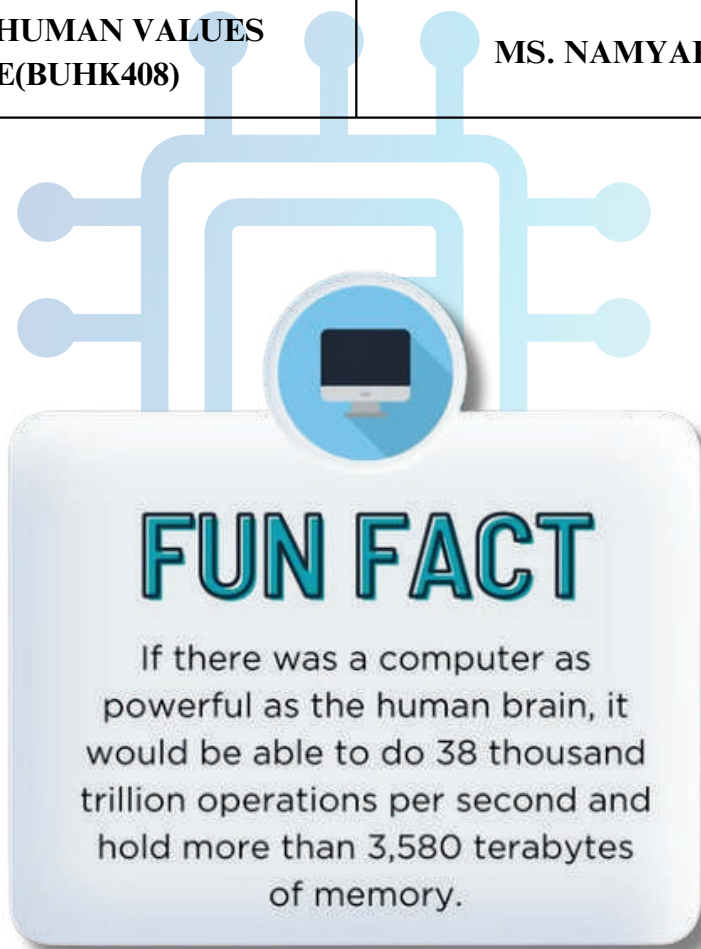
- **Open Seminar-2** of **Mr. T. Somesekhar** (USN: 1KS17CS01) was held on 15th July 2024 at 1:30 PM at the CSE R&D Centre, **KSIT**. His research, "**Quality Assessment System for Air Pollution Control in India through Calibration and Machine Learning Algorithm**," focuses on air pollution control. The session was evaluated by **Dr. Rekha B. Venkatapur**, **Dr. Hemavathi R. Dhemanali**, and **Dr. Malini M. Patil**.

- **Open Seminar-2** of **Ms. Kavitha K. K** (USN: 1KS17PEA01) took place on 15th July 2024 at 2:30 PM at the CSE R&D Centre, KSIT. Her research, "**A Compression Scheme and its Performance Analysis for Progressive Transmission of Video Sequences**," explores video compression. The review panel included **Dr. Rekha B. Venkatapur**, **Dr. C. B. Akki**, and **Dr. Malini M. Patil.**

- **Comprehensive Viva Voce Examination** of **Mr. Roopesh Kumar B. N** (USN: KS20PCS01) was held on **16th July 2024** at KSIT as per VTU guidelines. His research, "**Farobust Multistage Design Towards Mitigating Phishing Adversaries Using Extreme Ensembling Technique**," focuses on cybersecurity. The panel included **Dr. Rekha B. Venkatapur, Dr. Shaila S. G., Dr. Ramakrishnam, and Dr. Dilip N. Kumar.**

100% RESULT

VIII SEMESTER	
SUBJECT	**STAFF**
INTERNET OF THINGS (18CS81)	Mr. ABHILASH L BHAT, Mrs. SUMA RAJESH
STORAGE AREA NETWORKS(18CS822)	Dr.REKHA B VENKATAPUR, Mrs.RASHMI H

VI SEMESTER	
SUBJECT	**STAFF**
RENEWABLE ENERGY POWER PLANTS (21ME652)	Dr. SRINIDHI ACHARYA S R
COMPUTER GRAPHICS AND FUNDAMENTALS OF IMAGE PROCESSING (21CS63)	Mrs. ROOPASHREE S V
ADVANCED JAVA PROGRAMMING(21CS642)	Mr.LAXMIKANTHA K
SOFTWARE ENGINEERING AND PROJECT MANAGEMENT(21CS61)	Mr.KRISHNA GUDI

IV SEMESTER	
SUBJECT	**STAFF**
BIOLOGY FOR ENGINEERS (BB0K407)	**Dr. SHOBHA G**
ANALYSIS & DESIGN OF ALGORITHMS(BCS401)	**MR.RAGHAVENDRACHAR S, DR. SUNITA CHALAGERI, MR. ABHILASH L BHAT**
UI/UX(BCS456C)	**DR. KUSUMA T, MRS.SHRUTHI T S, MRS. RAMYA R**
UNIVERSAL HUMAN VALUES COURSE(BUHK408)	**MS. NAMYAPRIYA D**

FUN FACT

If there was a computer as powerful as the human brain, it would be able to do 38 thousand trillion operations per second and hold more than 3,580 terabytes of memory.

TOPPERS

VIII SEMESTER			
Sl no.	USN	NAME	PERCENTAGE
1	1KS20CS017	BRUNDA B	68.00%
2	1KS20CS108	VANDANA N	67.86%
3	1KS20CS023	DHANYA SHARANYA SHREE R	67.57%

VI SEMESTER			
Sl no.	USN	NAME	PERCENTAGE
1	1KS21CS014	ARCHANA P	93.375%
2	1KS21CS114	VIJETHA S	93.125%
3	1KS21CS031	GOPALA KRISHNA V	92.75%

IV SEMESTER			
Sl no.	USN	NAME	PERCENTAGE
1	1KS22CS067	LAKSHMI SHREE K P	90.22%
2	1KS22CS169	THANUSHA S	89.78%
3	1KS22CS161	SUPRIYA K	91.63%

ALUMNI INTERVIEW

Name: Ajay Girish
Job Role: Technical Consultant
Company: Razorpay
Place: Bengaluru
Graduated from KSIT in the year: 2024

How do you manage time and set priorities?
I'm naturally a night owl, so I structured my schedule accordingly. Honestly, I used to study just a day before exams, so it was pretty chill overall.

How do you plan to achieve your ambitions and goals in life?
I focus on avoiding lethargy and procrastination by setting weekly goals, breaking down bigger tasks into manageable steps. This way, I ensure consistent progress without feeling overwhelmed.

Share your experience of working as your job role?
Working at Razorpay has been a great learning experience. I've gained insights into how a late-stage startup operates, the inner workings of payment systems, and Razorpay's products. Debugging and making PRs to enhance customer experience has been rewarding. Plus, the work culture is fantastic!

What attitude do you need to become successful?
Humility and a strong eagerness to learn—no matter how cliché it sounds, these qualities truly make a difference.

Tell me about your college life?
College was an exciting time! I was actively involved in various groups, organized events, and participated in inter-department activities. It was a fun and memorable experience.

EDITORIAL COMMITTEE

Ms. Namyapriya D

Ms. Roopashree S V

STUDENT COMMITTEE

Srinidhi Madhusudan

Varun Sai V

Sourav G

Saketh A V

K S Group of Institutions

K. S. INSTITUTE OF TECHNOLOGY
14, Kanakapura Main Rd, Raghuvanahalli, Bangalore City Municipal Corporation Layout, Bengaluru, Karnataka 560109

K. S. SCHOOL OF ENGINEERING AND MANAGEMENT
Holiday Village Road, Vajarahalli Village, Mallasandra, off, Kanakapura Rd, Bengaluru, Karnataka 560109

K.S. SCHOOL OF ARCHITECTURE
Holiday Village Road, Vajarahalli Village, Mallasandra, off, Kanakapura Rd, Bengaluru, Karnataka 560109

K.S. PUC COLLEGE
14, Kanakapura Main Rd, Raghuvanahalli, Bangalore City Municipal Corporation Layout, Bengaluru, Karnataka 560109

K S POLYTECHNIC
Holiday Village Road, Vajarahalli Village, Mallasandra, off, Kanakapura Rd, Bengaluru, Karnataka 560109