



KAMMAVARI SANGAM- 1952

K S Institute of Technology

#14, Raghuvanahalli, Kanakapura Road, Bengaluru 560109
(Affiliated to VTU, Belagavi, Approved by NAAC
and NBA-CSE)

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 experimental learning and research with professional ethics.*
- 3. Encourage teamwork through inter- disciplinary projects and evolve as leaders with social concerns*

Volume 7, Issue 2

July 2021- December 2021

Program Educational Objectives

PEO1: Excel in professional 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 & Engineering.

PEO2: Continuously enhance their knowledge on par with the development in IT industry and pursue higher studies in Computer Science & Engineering.

PEO3: Exhibit professionalism, cultural awareness, team work, ethics, and effective communication skills with their knowledge in solving social and environmental problems by applying computer technology.



Sri. R Rajagopal Naidu
President



Sri. R Leelashankar Rao
Secretary



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

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.

If opportunity doesn't knock, build a door.



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 an enormous support from the Head of department as well the management. Students of CSE department are highly motivated and ready for IT Industry with hands on experience on current technologies/programming languages. KSIT is accredited by NAAC and Department by NBA. In VTU results, students are getting ranks and are working with reputed companies with higher salary packages. The students are actively participating in Hackathons and other coding contest at the International, National and State level and making their foot prints. Our mission is to inculcate strong theoretical and practical knowledge for continuous learning and prepare students to find Computer Solutions for the 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 standard to achieve academic excellence and provides platform for the students to achieve their career goals. Several patents have been filed by the Department faculty. 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. The department preserves its achievements and I am excited to announce that our department newsletter “CS GYANBYTES” is all set to release the volume 7 issue 2.

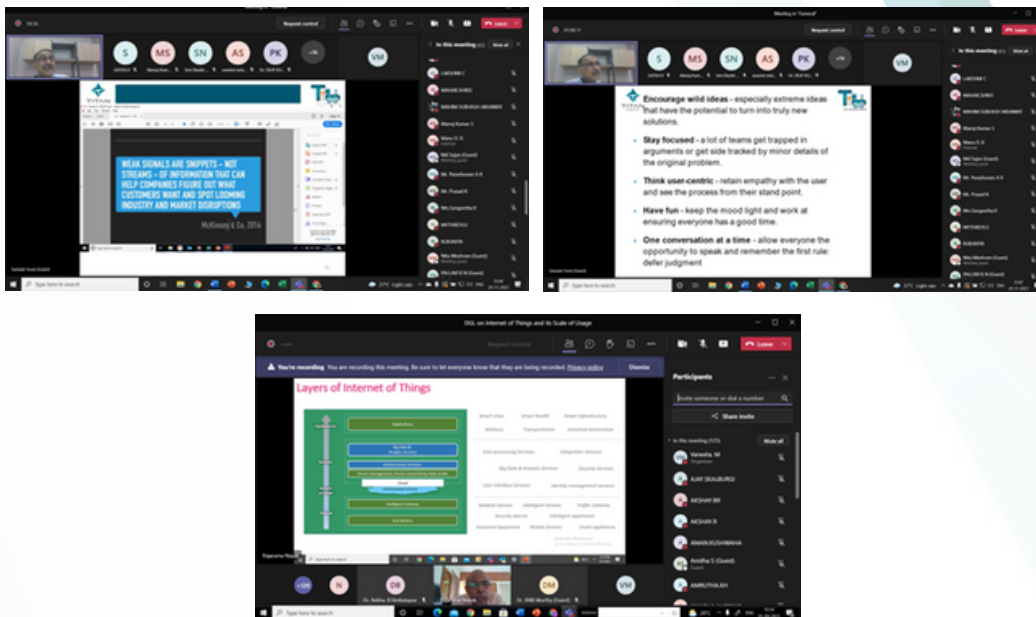
-Dr. Rekha B Venkatapur
HOD

MEMORANDAUM OF UNDERSTANDING

- MOU between Prinston Smart Energies and KSIT was signed on 30th September 2021 providing Student Internship Programme from Faculties/Guides, Training on technologies, Exposure and work on real time projects with program titled “Introduction to Machine Learning with Python, Cyber Security, Full stack Development” and this MOU is valid from 30th September 2021 – 29th September 2025.
- MOU between Savory Minds Pvt Ltd. and KSIT was signed on 20th September 2021 providing Student Internship Programme from Faculties/Guides, Training on technologies, Exposure and work on real time projects and this MOU is valid from 20th September 2021 – 19th September 2022.

EVENTS CONDUCTED

- The Department of Computer Science and Engineering in association with BITES Organized Distinguished Guest Lecture on “Design Thinking and Innovation” on 24th November 2021.



Screenshots of presentation on Design Thinking and Innovation

- The Department of Computer Science and Engineering in association with BITES Organized Distinguished Guest Lecture on “Internet of Things and its scale of usage” by Mr. Rajarama Nayak, Head Connected Consumer Products and Solutions, IoT Unit, Tata Consultancy Services, Bengaluru on 1st September 2021

fuel your success with passion and enthusiasm

- Webinar on “Design Innovation for Successful Career in the field of Aviation” was conducted by Mr. Dhanish Abdul Khader Space Systems Engineer, S S Technologies Bangalore on 17th July 2021.

EVENTS ATTENDED BY FACULTY

- Ms. Pallavi K. N attended online Faculty Development Programme on “An Overview of Teaching Techniques in Innovation & Design Thinking” organized by VTU Human Resource Development Centre (VTU-HRDC), VIAT, Muddenahalli, Chikkaballapur from 27th - 31st December 2021.
- Ms. Rashmi H attended online Faculty Development Programme on “An Overview of Teaching Techniques in Innovation & Design Thinking” organized by VTU Human Resource Development Centre (VTU-HRDC), VIAT, Muddenahalli, Chikkaballapur from 27th- 31st December 2021.
- Dr. Deepa S R attended online Faculty Development Programme on “Artificial Intelligence and Machine Learning” organized by R.N.S. Institute of Technology from 29th September - 1st October 2021.
- Mr. Manoj Kumar S attended an online Workshop on “Software Defined Networks and its Applications” organized by the IEEE Computer Society, RVCE Student Chapter from 27th September – 1st October 2021.
- Ms. Beena K attended online Faculty Development Programme on “Mathematics in AI, ML and DL for faculty & Practitioners” organized by K.L.E. Institute of Technology, Hubli from 1st - 5th September 2021.
- Dr. Vijayalaxmi Mekali attended online Faculty Development Programme on “Current Era – A technology driven Digital Transformation in Industry 4.0” organized by department of ISE, S.J.B. Institute of Technology, Bengaluru from 30th August - 4th September 2021.
- Ms. Beena K attended online Faculty Development Programme on “Feature Engineering in Data Science & Deep Learning Models” organized by Global Academy of Technology from 25th - 29th August 2021.
- Ms. Ranjitha K N attended online Faculty Development Programme on “Feature Engineering in Data Science & Deep Learning Models” organized by Global Academy of Technology from 25th - 29th August 2021.
- Dr. Vijayalaxmi Mekali attended online Faculty Development Programme on “Research Innovation & Recent Trends in Electrical & Electronics Engineering”, organized by S.J.B. Institute of Technology, Bengaluru, from 16th - 20th August 2021.

- Ms. Sougandhika Narayan attended online Faculty Development Programme on “Research Innovation & Recent Trends in Electrical & Electronics Engineering” organized by S.J.B. Institute of Technology, Bengaluru, from 16th - 20th August 2021.
- Ms. Beena K attended online Faculty Development Programme on “Research Innovation & Recent Trends in Electrical & Electronics Engineering” organized by S.J.B. Institute of Technology, Bangalore from 16th - 20th August 2021.
- Ms. Ranjitha K N attended online Faculty Development Programme on “Research Innovation & Recent Trends in Electrical & Electronics Engineering” organized by S.J.B. Institute of Technology, Bengaluru, from 16th - 20th August 2021.
- Dr. Vijayalaxmi Mekali attended online Faculty Development Programme on “Emerging Trends in Computation” organized by Ramaiah Institute of Technology in association with CISCO system (India) Private Limited, Bangalore from 2nd - 6th August 2021.
- Mr. Manoj Kumar S attended an online Workshop on “Software Defined Networks and its Applications” organized by the IEEE Computer Society, RVCE Student Chapter from 27th September – 1st October 2021.
- Dr. Vaneeta M attended online Faculty Development Programme on “Emerging Trends in Computation” organized by Ramaiah Institute of Technology in association with CISCO system (India) Private Limited, Bangalore from 2nd - 6th August 2021.
- Dr. Vijayalaxmi Mekali attended online IOT and Robotics Workshop “Learn to Build the Future” organized by WilSkillSolutions and Hapy Edutech in collaboration with HKBK college of Engineering, Bangalore from 30th July - 1st August 2021.
- Dr. Vaneeta M attended online Faculty Development Programme on “Practical insight into key concepts of blockchain” organized by AICTE Training and Learning (ATAL) Academy in collaboration with Ramaiah Institute of Technology from 12th July-16th July 2021.

PUBLICATIONS BY FACULTY

- Dr. Vaneeta M “Efficient Intrusion detection of malicious node using Bayesian Hybrid Detection in MANET”, IOP Conference Series: Material Science and Engineering, Online ISSN: 1757-899X, 2021 Print ISSN: 1757-8981, doi:10.1088/1757-899X/1022/1/012077.

- Dr. Vijayalaxmi. Mekali “Fingervein Detection Using Image Processing”, International Journal of Scientific Research in Engineering and Management (IJSREM), Volume: 05 Issue: 07 | July - 2021 ISSN: 2582-3930.
- Mrs. Ranjitha K N “Text Extraction and Recognition from Images”, International Advanced Research Journal in Science, Engineering and Technology, Vol. 8, Issue 7, July 2021, DOI: 10.17148/IARJSET.2021.8773.
- Dr. Rekha B Venkatapur “A Survey on Application of Deep Learning : Unsupervised Autoencoder”, International Conference on “Global Convergence in Technology, Entrepreneurship, Computing and Value Engineering: Principles and Practices” (IGCP - 2021) organized by Sapthagiri College of Engineering, Held on 16th and 17th of July 2021.
- Mr. Raghavendrachar S “A Survey on Application of Deep Learning: Unsupervised Autoencoder”, International Conference on “Global Convergence in Technology, Entrepreneurship, Computing and Value Engineering : Principles and Practices” (IGCP - 2021) organized by Sapthagiri College of Engineering, Held on 16th and 17th of July 2021.
- Dr.Rekha B Venkatapur “Voice Based E-Prescription”, 4th National Conference on “Emerging Trends in Information Technology - NCETIT - 2021” Organized by department of Information Science and Engineering, DBIT - Bengaluru held on 19-07-2021 and 20-07-2021.
- Dr. Dayananda R B “Critical Survey for Scheduling and Resource Allocation methods in Hadoop-MapReduce on Clouds”, National Conference on Engineering Innovations in Emerging and Technology (NCEIET-2021) organized by Dept of ISE East Point College of Engineering Technology, held on 19th and 20th July 2021.
- Dr.K Venkata Rao “Remote Access”, 4th National Conference on “Emerging Trends in Information Technology - NCETIT - 2021” Organized by department of Information Science and Engineering, DBIT - Bengaluru held on 19-07-2021 and 20-07-2021.
- Mr. Kumar K “Listen for Vision”, 4th National Conference on “Emerging Trends in Information Technology - NCETIT - 2021” Organized by department of Information Science and Engineering, DBIT - Bengaluru held on 19-07-2021 and 20-07-2021.
- Dr. Vaneeta M “Efficient Intrusion detection of malicious node using Bayesian Hybrid Detection in MANET”,IOP Conference Series: Material Science and Engineering, Online ISSN: 1757-899X, 2021 Print ISSN: 1757-8981, doi:10.1088/1757-899X/1022/1/012077.

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- Mrs. Ranjitha K N “Text Extraction and Recognition from Images”, International Advanced Research Journal in Science, Engineering and Technology, Vol. 8, Issue 7, July 2021, DOI: 10.17148/IARJSET.2021.8773.
- Dr. Rekha B Venkatapur “A Survey on Application of Deep Learning : Unsupervised Autoencoder”, International Conference on “Global Convergence in Technology, Entrepreneurship, Computing and Value Engineering: Principles and Practices” (IGCP – 2021) organized by Sapthagiri College of Engineering, Held on 16th and 17th of July 2021.
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- Dr.K Venkata Rao “Remote Access”, 4th National Conference on “Emerging Trends in Information Technology – NCETIT – 2021” Organized by department of Information Science and Engineering, DBIT – Bengaluru held on 19-07-2021 and 20-07-2021.
- Mr. Kumar K “Listen for Vision”, 4th National Conference on “Emerging Trends in Information Technology – NCETIT – 2021” Organized by department of Information Science and Engineering, DBIT – Bengaluru held on 19-07-2021 and 20-07-2021.
- Mr. Raghavendrchar S “Animal Intrusion Detection Using Machine Learning”, 4th National Conference on “Emerging Trends in Information Technology – NCETIT – 2021” Organized by department of Information Science and Engineering, DBIT – Bengaluru held on 19-07-2021 and 20-07-2021.

- Mrs. Beena “Detection Of Melanoma Skin Cancer”, 4th National Conference NCETIT ' 2021.

ACHIEVEMENTS BY FACULTY

PAPER REVIEWER

- Dr. Deepa S R, Reviewer of manuscript with title “Interference Minimization and Proportional Fairness Scheduling in D2D Communication Networks using Multi-Objective Gradient Based African Buffalo Optimization Algorithm” for the Peer reviewed Scopus Indexed Journal-Wireless Networks, Springer August 2021.

AWARDS

- Dr. Deepa S R, Received “Pratibha Puraskara Award” from Karnataka Arya Vysya Mahasabha, Shivamogga District, Karnataka on 26th December 2021.

RECOGNITION

- Dr. Rekha B Venkatapur appointed as a member of “The Board of Studies in Computer Science and Engineering (CSE/ISE)” of Visvesvaraya Technological University, Belagavi for the duration 2019-2022 and prepared CSE, AI-DS UG syllabus and submitted to BoS chairman. She also completed VTU Ph. D Course work syllabus setting for Computer Science and Engineering - group (1-6) for the academic year 2020-2023.
- Dr. Rekha B Venkatapur is Doctoral Committee Member of VTU research centers such as Nitte Meenakshi Institute of Technology, Dr. Ambedkar Institute of Technology, Vemana Institute of technology, BMS College of Engineering research center, Dayananda Sagar College of Engineering, East West Institute of Technology, J S S Academy of Technical Education, K S School of Engineering and Management, K S Institute of Technology, Bangalore
- Dr. Ram P Rustagi appointed as a “Chairman/Member of Constitution of Board of Examiners” of Visvesvaraya Technological University, Belagavi for the duration 2020-2021.
- Dr. Ram P Rustagi, Professor and KRP, KSGI is a Chief Technical Advisor/Consultant. He provides Technical Guidance in Engineering Design and Development for Funding Agency - Personal Air Quality Systems (PAQS) Pvt Ltd, for the duration of one year.

PATENTS BY FACULTY

- Dr. Deepa S. R and Dr. Vaneeta M, Title of Invention “Ceiling Fan” design patent, Patent Office Government of India, applied on 26th October 2021 and granted with Design No 352085-001.
- Mr. Kushal Kumar B. N, Title of Invention “Learning Long Term Model for Prediction of Air Pollution Causing Pollutants for Bengaluru Environment” Intellectual Property India, applied on 14th July 2021 and granted with CBR no 25701.

ACHIEVEMENTS BY STUDENTS

- Dhananjaya S and Gautham M, won the second prize of the event “Hackfest-2021” organized by ATMECE, Mysuru on 2nd – 3rd July 2021.
- Pranav M. S, Raksha S, Samhitha, Suraj Jawoor won 3rd Rank with a cash prize of Rs.1,00,000 of the event “Aadhar Hackathon 2021” organized by UIDAI from 28th – 31st October 2021.



Pranav M. S, Raksha S, Samhitha, Suraj Jawoor are felicitated by Shri Rajeev Chandrasekhar with awards and certificates during the valedictory session of the Aadhar Hackathon 2021.

I am a work in progress. I am still growing and learning.

RESEARCH ACTIVITIES



- **Dr. Vijayalaxmi Mekali has been awarded Doctor of Philosophy from Visvesvaraya Technological University, Belagavi, Karnataka, India, July 2021, for the Thesis Titled “Medical Image Analysis using Computational Methods to Detect and Diagnose Cancer Tumor” carried out under the Research Supervision of Dr. Girijamma H A, Professor, Department of Computer Science and Engineering, R. N. S Institute of Technology, Bengaluru.**



- **Dr. K Venkata Rao has been awarded Doctor of Philosophy from Jain Deemed to be University, Bangalore, Karnataka, India, August 2021, for the Thesis Titled “Design and Implementation of Robust Model for Small Scale Software Firms” carried out under the Research Supervision of Dr. R. Balakrishna, Professor and Dean, Rajarajeshwari College of Engineering, Bengaluru.**

I am a work in progress. I am still growing and learning.



- **Dr. Swetha P** has been awarded Doctor of Philosophy from Visvesvaraya Technological University, Belagavi, Karnataka, India, October 2021, for the Thesis Titled “Customer Churn Prediction in the Telecom Domain using Machine Learning Algorithms” carried out under the Research Supervision of Dr. Dayananda R B, Professor, in R and D centre, Department of Computer Science and Engineering, K. S Institute of Technology, Bengaluru.

FUNDED PROJECTS

- The project titled “Voice Based E-Prescription” carried out by final year students Ms. Krithika Jagannath (1KS17CS036), Mr. Abhishek Gowda M V (1KS17CS002), Ms. Meghana G (1KS17CS042) and Mr. Ashish Amar (1KS17CS013) under the guidance of Dr. Rekha B Venkatapur was selected for VTU Financial Assistance for Innovative Projects of Final Year UG Students-2021 and received Financial Assistance of Rs. 5000.
- The project titled “Be My Book -You hear what you choose to read” carried out by Final year students Ms. Amogha Manjunatha K (1KS17CS006, Ms. Sakshi Kumari (1KS17CS071), Ms. Srikala K M (1KS17CS083) and Ms. Swati Pai (1KS17CS089) under the guidance of Dr. Ram P Rustagi was selected for VTU Financial Assistance for Innovative Projects of Final Year UG Students-2021 and received Financial Assistance of Rs. 5000.
- The project titled “Reading physical book for visually impaired person through voice over navigation system”, carried out by Final year students Ms. Amogha Manjunatha K (1KS17CS006, Ms. Sakshi Kumari (1KS17CS071), Ms. Srikala K M (1KS17CS083) and Ms. Swati Pai (1KS17CS089) under the guidance of Dr. Ram P Rustagi was selected for Karnataka State Council for Science and Technology: 44th Series of Student Project Programme-2021 and received grant of Rs. 5000.

I can overcome any challenge that comes my way.

100% RESULT



Mr. Harshavardhan J R
System Modelling and Simulation(17CS834)



Mr. Kumar K
System Modelling and Simulation(17CS834)

TOPPERS



Swathi Pai
1KS17CS089
SGPA: 9.20



Spoorthi R
1KS17CS081
SGPA: 9.25

A comfort zone is a beautiful place, but nothing ever grows there

ALUMNI INTERVIEW



Name: Sanath Ramesh

Job Role & Company : Business Analyst II, Amazon

Place: Arizona, USA

Graduated Year:

KSIT - 2018,

Arizona state university- 2022

How do you manage time and set priorities?

I mostly tend to follow a schedule. I set priorities based on the impact.

How do you plan to achieve your ambitious and goals in life?

Having a plan definitely helps, keeps you on track. However, what's even more important is to be honest to yourself and just believe in the process than being result oriented.

What attitude do you need to become successful?

I believe it all comes down to how you tackle a problem. I tend to stay optimistic and look at the positives out of every situation. It might sound cliché but keeping a positive attitude helps me stay focused.

Tell me about your college life.

The only period of my life when I had time and I made full use of it. To keep it short my college life was made of friends, road trips, night outs, organizing events at college and friends again. At the end, managed to get good grades as well. So study hard but don't forget to have fun!

To be positive is to be productive.



Editorial Committee

Dr. Vijayalaxmi Mekali

Mrs. Pallavi K N

Student Committee

Ajay Girish

Vibha Govin S