OUR VISION

To be a center of excellence in core Information Technology and multidisciplinary learning and research, where students get trained in latest technologies for professional and societal growth.

Editorial Team

Staff: Dr. B. Kezia Rani, Assoc. Prof.

Students:
- K. Krishna
- A. Varun Kumar Reddy

OUR MISSION

To enable the students acquire skills related to latest technologies in IT through practice oriented teaching and training.

PROGRAM SPECIFIC OUTCOME

The students will demonstrate:

1. Competency in programming using different programming languages to implement algorithms.

2. Competence in analysis and design of a software solution using different modelling tools

3. Competency in Electronic Design and Embedded System Design using different simulation tools.

3. With competence to succeed in their professional lives with ethical values.

Program Educational Objectives

The Programme will produce graduates:

1.With sound theoretical and practical knowledge to obtain employment or pursue advanced studies and solve problems in Information Technology.

2. With effective written and oral communication skills that will help them to work in a diversified and dynamic working environment.

3.With competence to succeed in their professional lives with ethical values.

PROGRAM OUTCOMES (PO'S)

Engineering Graduates will be able to:

1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

2. Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.

4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.

5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.

7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.

8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

9. Individual and teamwork: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.

11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.

12. Life-long learning: Recognize the need for and have the preparation and ability to engage in independent and life-long learning in the broadest context of technological change.

LED in the place of projection

The myth that projection is more effective than LED still lingers in some sectors. As AV industry leaders, we have seen LED start to take centre stage at events and in permanent installations throughout 2018 so far. The versatile, modular format continues to lead the way, replacing traditional projection as an alternative for more and more brands and events.

First of all, LED has the edge on brightness. It is less affected by light conditions than a projector because it emits its own light and manages its own brightness. This means it can function as a high-quality display for outdoor events and conferences. It's also cost-effective, with a wide-range of options to suit all budgets.

LED also comes in a range of pixel pitches, from as little as 1 mm, so you can achieve a high-quality HD finish. Plus, LED walls are easy to set up and transport with individual panels and modules that slot together easily and in a range of formations and shapes. This has endless benefits for displays at both temporary showcases and permanent spaces, with quick and easy access to maintenance points.

LED wall panels are becoming the new standard bearer in outdoor video production. Their bright image and ease of use makes them an attractive option for many different settings including: stage backdrops, advertising signs, scenic pieces, and immersive centerpieces. This increased demand for LED also means that buying or renting them is getting more and more affordable.

The brightness of LED panels is probably the main reason as to why they are supplanting projectors as the top choice for visual production. LED panels generate their own brightness, so the image is much more vivid when it reaches the viewer, while projectors have to transmit the image to a projection screen, which then has to travel to the viewer's eyes. Because light has to travel further and has to reflect off of the screen, there is a higher chance for the image to lose its brightness and crisp content.

Ambient light plays a huge factor in projection image quality, and events, such as outdoor music festivals, ballparks, stadiums, fashion and auto shows, will make a projected image more difficult to see.Another advantage that LED has over projection, is that in some situations, full brightness might not even be needed for the image to pop, and while it may not be of great concern on show site, it sure makes a difference on the energy bill.

K.Krishna
BE 3/4 IT- B

New approaches to privacy and security

The technological development boosts the importance of data, so hacking techniques become ever more progressive. The increase in numbers of devices connected to the internet creates more data but also makes it more vulnerable and less protected. IoT gadgets are getting more popular and widely used, yet they remain extremely insecure in terms of the data privacy. Any large enterprises are constantly under threat of hack attacks, as it happened with uber and verizon in 2017.

Luckily, the solutions are achievable, and this year we will see great improvements in the data protection services. Machine learning will be the most significant security trend establishing a probabilistic, predictive approach to ensuring data security. Implementing techniques like behavioral analysis enables detecting and stopping an attack capable of bypassing the static protective systems.

Blockchain brought our attention to a new technology called zero knowledge proof which will further develop in 2018 enabling transactions that secure users' privacy using mathematics. Another new approach to safety is known as CARTA(Continuous adaptive risk and trust assessment).
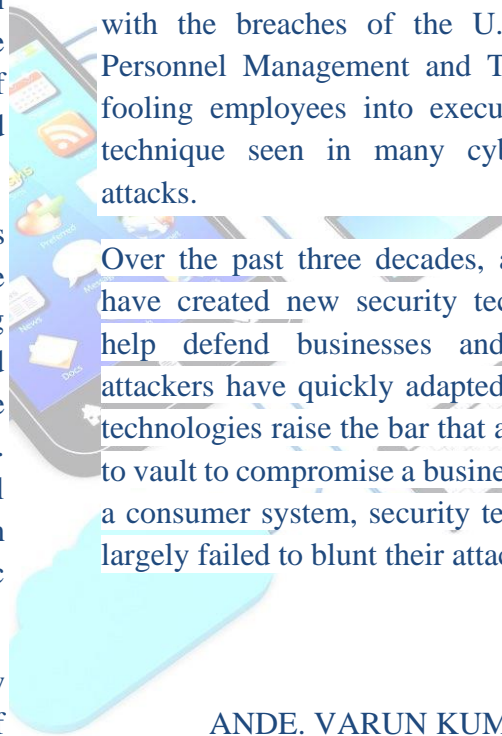
It is based on a continuous evaluation of the potential risks and the degree of trust, adapting to every situation. This applies to all business participants: from the company's developers to partners. Although our security is still vulnerable, there are promising solutions that can bring better privacy into our lives.

The most common systems protecting the networks and data in today's firms are most likely based on technology that is more than a decade old. Attackers are getting around companies' data security measures, whether by exploiting trusted third-party systems—as with the breaches of the U.S. Office of Personnel Management and Target—or by fooling employees into executing code—a technique seen in many cyber-espionage attacks.

Over the past three decades, as companies have created new security technologies to help defend businesses and consumers, attackers have quickly adapted. While most technologies raise the bar that attackers have to vault to compromise a business network or a consumer system, security technology has largely failed to blunt their attacks.

ANDE. VARUN KUMAR REDDY
BE 3/4 IT- B

Faculty Seminars/Workshops/ Guest Lectures/ Personality Development Programmes/ Conferences National / International Staff Development Programmes organized in the Department:

Sl. No	Date	Details	Name of the Eminent Person and organization who have addressed	Target Audience
1	8th - 13th March, 2021	One week Outreach Programme on IT Essentials: PC Hardware, Software and Networking organized by Dept. of IT, VCE Coordinators Mr. N. David Raju, Asst. Prof. Mr. M. Krishna Kishore, Asst. Prof.	1. Dr. T.Sunand Emmanuel, Asst. Prof., HSS 2. Prof. K. Kishore, Prof., MED. 3. Dr. B. Kezia Rani, Assoc. Prof., IT 4. Mr. K. Srinivasa Chakravarthy, Asst. Prof., IT 5. Mrs. S. Sreelakshmi, Asst. Prof., IT (SS) 6. Mr. K.Rama Krishna, Asst. Prof., IT (SS) 7. Mr. N. David Raju, Asst. Prof., IT 8. Mrs. DRL Prasanna, Asst. Prof., IT 9. Mrs. L. Divya, Asst. Prof., IT 10. Mrs. C. Sireesha, Asst. Prof., IT 11. Mrs. B. Leelavathy, Asst. Prof., IT 12. Ms.Vanisri K, Asst. Prof., IT 13. Mr. R. Krishnam Raju, Web Designer, CC 14. Mr. P.Mallikarjun, Instrument Mechanic, CC	31 participants from Ibrahimbagh, Langarhouse,, Golconda, Attapur, Narsingi, Puranapool, Hydershahkot, Shankarpally, Tolichowki, Shamshabad
2	21st – 30th June, 2021	Online Faculty Development Programme (FDP) on Deep Learning and AI Applications Organized by E&ICT Academy, National Institute of Technology, Warangal, in association with Department of IT, Vasavi College of Engineering (Autonomous), Hyderabad.	1. Prof. P Radha Krishna, NITW 2. Dr. M Srinivas, NITW 3. Prof. Garimella Ramamurthy, Mahindra University 4. Dr M Anand Kumar, NITK Surathkal 5. Prof. RBV Subramanyam, NITW 6. Dr. Argya Pal, USA Dr. Ijjina Earnest Paul, NITW	Total 69 participants from other Colleges and our college

Staff Participation / Attended:

Sl. No	Name of the Staff Member, Designation	Title of the event (Seminar/Workshops etc.) attended & Venue	Date (s) of event	Details of experts Addressed
		January -2021		
		NIL		

February - 2021

1	1. Mrs. S. Aruna, Assoc. Prof. 2. Dr. S. K.Chaya Devi, Assoc. Prof. 3. Mrs. S. Sreelakshmi, Asst. Prof. 4. Mr. K. Srinivasa Chakravarthy, Asst. Prof. 5. Mrs. DRL Prasanna, Asst. Prof. 6. Mrs. L. Divya, Asst. Prof. Mrs. B. Leelavathy, Asst. Prof.	Deep Learning Session Hands-on in IT Lab V, Dept. of IT, VCE.	06.02.2021, 20.02.2021 27.02.2021 (3 days)	Dr. Raghavendra Kune, Adjunct Faculty & Scientist /Engineer 'SG', Head High performance computing Drones (HPCD), ADRIN, ISRO
2	Dr. K. Shyam Sunder Reddy, Assoc. Prof.	Online Short Term Course on Data Analytics using Python conducted by Department of CSE and Dept. of Mathematics, NIT Warangal Center for continuing Education	08.02.2021 to 12.02.2021	Participated
3	Dr. V. Venkata Krishna, Prof.	online webinar on Awareness about NBA Accreditation organized by Ganpat University, Faculty of Computer Applications	13.02.2021	Participated
4	1. Dr. S.K. Chaya Devi, Assoc. Prof. 2. Mr. G. Rajashekhar, Asst. Prof. Mr. G. Srinivasa Rao, Asst. Prof.	Faculty Development Programme (FDP) on Industrial Internet of Things (IIoT) organizing by CSE, VCE in association with Instaivy Technologies and Education Pvt. Ltd.	16-20 February, 2021	Attended
5	1. Dr. S.K. Chaya Devi, Assoc. Prof. 2. Mr. G. Rajashekhar, Asst. Prof. Mr. G. Srinivasa Rao, Asst. Prof.	Demo on IOT Kits	26-27 February, 2021	Mr. Praveen, IOT Trainer, M/s. Enthu Technologies

March- 2021

1	Dr. K. Shyam Sunder Reddy, Assoc. Prof.	4-Week Induction/Orientation Programme for "Faculty in Universities/Colleges/Institutes of Higher Education" and obtained Grade A+. organized by Teaching Learning Centre, Ramanujan College University of Delhi under	February 11 - March 13, 2021	successfully completed

		the aegis of MINISTRY OF EDUCATION PANDIT MADAN MOHAN MALAVIYA NATIONAL MISSION ON TEACHERS AND TEACHING		
2	Dr. B. Kezia Rani,Assoc. Prof.	Live Online-instructor-led 10 days (30 hours) FDP /short Training on Blockchain Technology & its Applications organized by EduxLabs (Esoir Business Solution LLP) in association with E-Cell IIT Hyderabad	2nd March to 14th March, 2021	attended
3	Mrs. S. Sreelakshmi, Asst. Prof. (SS)	One week Instructor Led Live Online Training o Deep Learning using Medical Data held during organized by Finland Labs (A unit of Revert Technology Pvt.Ltd.)	15-19 March, 2021	Completed
4	Ms. G. Radha, Asst. Prof.	12 Hour FDP on Introduction to Python Programming (Online Live FDP) conducted by ICT Academy	29-03.2021-03.04.2021	Participated and received certificate.
	Ms. Vanisri K, Asst. Prof.		30-03.2021-03.04.2021	Participated and not received certificate.
5	Mrs. S. Sreelakshmi, Asst. Prof. (SS)	Online STTP on Moodle learning Management System conducted by Department of Mechanical Engineering and Department of Computer Science and Engineering organized by NIT Warangal, Centre for Educational Technology.	04.01.2021 to 08.01.2021.	participated

April -2021

1	Ms. M. Gayatri, Asst. Prof.	FDP on Advancement of Intelligent System and Computation organized by the department of CSE, JIS college of engineering ,west Bengal,	20-24 April, 2021	Participated
2	Ms. M. Gayatri, Asst. Prof.	AICTE Training And Learning (ATAL) Academy Online FDP on "Computer Science & Biology at Sri Manakula Vinayagar Engineering College.	22-26 March, 2021	participated & completed successfully

May -2021

1	Mr. Rama Krishna, Asst. Prof.(SS)	Three Weeks International Faculty Development Program On "Research Perspectives on AI, ML, Data Science & IoT" Organized by Department of Electronics and Computer Science (ECS), in Association with Academic Staff College, K L Deemed to be University, Green Fields, Vaddeswaram, Guntur District, A.P	17-05-2021 to 05-06-2021	Attending
2	Ms. M. Gayatri, Asst. Prof.	National Webinar on Spatio Temporal Fusion Using Deep Networks organized by the department of CSE , JIS College of Engineering, West Bengal	22nd May 2021	participated

June -2021

1	M. Gayatri, Asst. Prof.	5 day fdp on Machine Learning organized by Dept of CSE & IT at JBIET	1-6-2021 – 05062021	participated
2	Mr. Rama Krishna,	Three Weeks International Faculty Development Program On "Research Perspectives on AI, ML, Data Science & IoT" Organized by Department of Electronics and Computer Science (ECS), in Association with Academic Staff College, K L Deemed to be University, Green Fields, Vaddeswaram, Guntur District, A.P	17-05-2021 -05-06-2021	attended
3	Mr. K. Rama Krishna	One week online FDP on Cyber Security & Cyber Forensics organized by the Dept of CSE MVSREC Hyd	14-18 june, 2021	attended
4	Dr. V. Venkata Krishna, Prof.	National Level one week Faculty Development FDP on Research areas in Artificial Intelligence &	14-20 June, 2021	Participated

		Machine Learning with Case Studies organized by Dept of CSE, International School of Technology and Sciences for Women in association with Gokaraju Rangaraju Institute of Engineering and Technology		
5	1. Mrs. S. Aruna, Assoc. Prof. 2. Dr. B. Kezia Rani, Assoc. Prof. 3. Dr. K. Shyam Sunder Reddy, Assoc. Prof. 4. Mr. K. Srinivasa Chakravarthy, Asst. Prof. 5. Mrs. DRL Prasanna, Asst. Prof. 6. Mrs. L. Divya, Asst. Prof. 7. Mrs. C. Sireesha, Asst. Prof. 8. Mrs. B. Leelavathy, Asst. Prof.	Online Faculty Development Programme (FDP) on Deep Learning and AI Applications Organized by E&ICT Academy, National Institute of Technology, Warangal, in association with Department of IT, Vasavi College of Engineering (Autonomous), Hyderabad.	21st – 30th June, 2021	Participated

Publications (Conferences, Journals, Books):

S No	List of Authors	Title of the paper	Name of the Journal / Conference (with volume, pg nos & year)
1	Praveen C. Menon1 B. Kezia Rani2 Kailash Kumar3 Varun Gupta4	An effective OS–DPLL design for reducing power dissipation in an IoT application	Journal of Ambient Intelligence and Humanized Computing https://doi.org/10.1007/s12652-021-03016-z Springer published online 8th March, 2021
2	Mr. K. Rama Krishna, Asst. Prof.	An Effective Analytics of Third Party Auditing and Trust Architectures for Integrity in Cloud Environment	Materials Today Proceedings (Elsevier Scopus) Materials Today: Proceedings Volume 46, Part 7 ISSN 2214-7853 21 April 2021

3	Dr. T. Hitendra Sarma, Assoc. Prof.	"Consistent and Composite Key Cryptosystem for secure Data Storage and Access in Cloud",	'International Journal of Innovative Technology and Exploring Engineering' that will publish at Volume-10 Issue-6, April 2021.
4	Dr. T. Hitendra Sarma, Assoc. Prof.	"A New CNN for pixel classification in Hyperspectral Images"	Second International Conference on Data Science and Applications (ICDSA 2021) April 10-11, 2021. Paper will be indexed in SCOPUS Indexed Springer Book Series, 'Lecture Notes in Networks and Systems.
5	G. Ramesh, Dr. K. Shyam Sunder Reddy, Dr. D. Venkatesh	Machine Learning Models For Predicting The Output Of A Solar Panel To Diagnose The Panel Faults	Published in Turkish Journal of Physiotherapy and Rehabilitation; 32(2) ISSN 2651-4451 | e-ISSN 2651-446X https://www.turkjphysiotherrehabil.org/ pp2476-2487
6	Mr. K. Rama Krishna, AP, MCA	"A Study on Data Mining Applications in Healthcare Sector" in the "International Conference onRecent Emerging Science, Engineering & Advanced Research in Communication and Healthcare-2021"(ICRESEARCH-2021),	Organized by the Department of Electronics and Communication Engineering & Department of Biomedical Engineering on 4th and 5th June 2021 at Aarupadai Veedu Institute of Technology (AVIT) of Vinayaka Mission's Research Foundation (VMRF), Paiyanoor, Chennai, India.

Other important events, if any:

- Affiliation with External Bodies: Dr. V. Venkata Krishna, Prof. Dept. of IT is an BOS External Expert Member in the Department of CSE, Keshav Memorial Institute of Technology (KMIT) for the course Programming for problem Solving.

- Dr. K. Shyam Sunder Reddy, Assoc. Prof. reviewed 5 papers for International Conference on Wireless Sensor Networks, Ubiquitous Computing and Applications 2021 (ICWSNUCA 2021) in January, 2021 and the review added to Easychair.

- Dr. Raghavendra, Adjunct Faculty and Scientist/Engineer SG Head High performance computing Drones(HPCD), Advanced Data Processing Research Institute (ADRIN), ISRO, visited the department for discussion on Project themes, new courses in the scheme and summary of subjects at project lab with demo on drones arrangement.

- Dr. K. Shyam Sunder Reddy, Assoc. Prof. reviewed 5 papers for International Conference on Wireless Sensor Networks, Ubiquitous Computing and Applications 2021 (ICWSNUCA 2021) held on 26-27 February 2021 in Hyderabad.
- Industry Institute Interaction: Col. Sri Charan and team members visited the department from M/s. HC Robotics Pvt. Ltd. as part of Industry Institute Interaction – Dr. Raghavendra Kune, Adjunct Faculty and faculty from department attended.
- Dr. Raghavendra Kune, Adjunct Faculty and Mr. Amit Kumar Gupta, Adjunct Faculty visited the department for discussion on Theme Based Projects to be conducted in VI-Semester for the academic year 2020-21.
- Dr. V. Venkata Krishna, Prof. attended as BOS Member as External Subject Expert at Keshav Memorial Institute of Technology (KMIT) on 10.03.2021.

- The following faculty & Non-Teaching staff joined in our department.

S. No.	Staff Name & Designation	Date of Joining
1	Ms. G. Radha, Asst. Prof.	16.12.2021
2	Ms. Vanisri Kyatham, Asst. Prof.	05.03.2021
3	Dr. Hitendra Sarma, Assoc. Pr of.	18.03.2021
4	Mr. A. Ranjith, Asst. Prof.	07.04.2021
5	Mr. A. Pravin Kumar, Lab Assistant	15.04.2021

- Dr. T. Hitendra Sarma, Associate Professor is External Examiner - M.Tech (CS) project viva-voce board on 17th of April, 2021, DEPARTMENT OF MATHEMATICS AND COMPUTER SCIENCE SRI SATHYA SAI INSTITUTE OF HIGHER LEARNING, (Deemed to be University) PRASANTHINILAYAM CAMPUS-515 134 Anantapuram District, Andhra Pradesh.

- Dr. T. Hitendra Sarma, Associate Professor
  - Resource Person – ATAL One Week Online Faculty Development Programme on "Cybersecurity Analytics" from 17th- 21st May, 2021.
    - delivered talk on "Mathematics for Data Analytics" – 17th May 2021
    - delivered a Tutorial on "Data Visualization" – 20th May 2021
- Delivered and invited talk on "Bayes Decision Theory" 8th April 2021, Department of CSE, JNTUA College of Engineering, JNT University Anantapur
- Mr. K. Srinviasa Chakravarthy, Asst. Prof. received the certificate of Appreciation in recognition of his contribution as Coordinator in supporting online FDP on Deep Learning and AI Applications held during 21-30 June, 2021.

- Dr. K. Shyam Sunder Reddy, Assoc. Prof., is Reviewer for following International Conferences.
  1. 4th International Conference on Computational Intelligence & Data Engineering (ICCIDE-2021), August 13-14, 2021, will be organized by VIT-AP University.
  2. International Conference on Advances in Computer Engineering & Communication Systems (ICACECS-2021), August 13-14. 2021, will be organized by the Department of CSE, VNR Vignana Jyothi Institute of Engineering and Technology.