

WARTECH



KOMMURI PRATAP REDDY INSTITUTE OF TECHNOLOGY

Department of Computer Science & Engineering

WARTECH, July-December 2017 VOL 2, Issue 1

Chairman:

Sri Kommuri Pratap Reddy

Vice Chairman:

Sri Kommuri Prashanth Reddy

Secretary:

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N. Bhavani

About The College



Kommuri Pratap Reddy Institute of Technology was established in the year 2008 by Kommuri Pratap Reddy Educational Society (KPES). The College is ideally located in a green campus of 12 acres land and is a place which is away from pollution but not far away from the city. The College is well connected by both private and public transport.

The College has state of the art laboratories, spacious class rooms and well established Library to cater to the student's needs. The whole campus is Wi-Fi enabled and has good internet connectivity. The College has good separate hostel facilities for Boys and Girls. The College has a hygienic canteen which provides good food to the staff and students of the college. The College also has a medical room with a Doctor and support staff.

Chairman's Message



It gives me immense pleasure and satisfaction that the Department of CSE is coming out with this latest edition of Newsletter. This Newsletter is a reflection of the facilities and the achievements of the Department. I wish all the best to the Department in its endeavors.

Vice Chairman's Message



I wish to express my happiness and gratitude to the Department of CSE on the happy occasion of the release of Newsletter. The Newsletter highlights the achievements of students and staff. All the Best!!.

Secretary's Message



I am happy to note that the Department of CSE is bringing out a Newsletter highlighting its achievements. I wish this department brings more and more Laurels to the College. I take this opportunity to wish you all the best.

Principal's Message



The Newsletter is a manifestation of the achievements in the department by the faculty and the students. I understand that the department of CSE has been consistently achieving several milestones and is constantly upgrading itself with latest technologies.

Also it is very glad to note that various teaching learning methodologies are being used to further strengthen the knowledge base of the students.

I wish all the success to the Department.

Head of the Department Message:



At the outset, I congratulate the editorial team members of CSE newsletter, for their efforts in bringing out the Newsletter. Newsletter is an amalgamation of all the events held in the department and plays an instrumental role in providing a greater exposure of the achievements accomplished by the students as well as faculty. I wish all the very best in your endeavors. My appeal to my dear students is to attend all classes, make use of library, laboratory extensively and read text books regularly, take part in technical paper presentations and seminars and undergo training in various skills sets.

This will make them more confident and they will not face difficult times in their professional career. In this respect, I humbly request the parents and guardians to show more interest in their ward's day to day activities and overall performance. Parents are also requested to attend without fail the parents association meetings held by the colleges.

Vision

The Vision of the Department is to provide leading programs in computer science whose graduates are recognized as innovative and well-prepared computing professionals.

Mission

The Department of Computer Science and Engineering teaches and conducts research in computer science and engineering and provides service to the University, the region, the nation, and the world. Faculty and staff strive to develop future leaders in academics and industry, with excellent technical skills, strong characters, and interesting learning abilities.

Program Educational Objectives (PEOs)

| PEO's | Statement |
|-------|----------------------------------------------------------------------------------------------------------------|
| PEO1 | The graduates of Computer Science and Engineering will have successful career in technology. |
| PEO2 | The graduates of the program will have solid technical and professional foundation to continue higher studies. |
| PEO3 | The graduate of the program will have skills to develop products, offer services and innovation. |
| PEO4 | The graduates of the program will have fundamental awareness of industry process, tools and technologies. |

Program Outcomes (POs)

Engineering Graduates will be able to:

PO1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2. 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.

PO3. 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.

PO.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.

PO5. 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.

PO6. 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.

PO7. 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.

PO8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10. 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.

PO11. 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.

PO12. 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.

Program Specific Outcomes (PSOs)

Foundation of mathematical concepts:
PSO1 To use mathematical methodologies to crack problem using suitable mathematical analysis, data structure and suitable algorithm.

Foundation of Computer Science: The ability to interpret the fundamental concepts and methodology of computer systems. Students can understand the functionality of hardware and software aspects of computer systems.
PSO2

Foundation of Software development:
PSO3 The ability to grasp the software development lifecycle and methodologies of software systems. Possess competent skills and knowledge of software design process.

About The Department

The Computer Science & Engineering Department offers UG & PG courses:

B. Tech in CSE

M. Tech in CSE

The Department of CSE has several Research areas of interest depending

upon the faculty interest. Broadly the areas of interest identified are:

1. Computer Networking
2. Data Mining
3. Computational Intelligence
4. Financial Time Series Forecasting
5. Predictive Systems
6. Data Base Security & Cryptography
7. Cloud Computing etc.

The department has four state-of-art laboratories equipped with latest technologies that help the students to perform practical's and also carry out their project works. Most of the faculty members also make use of these laboratories to pursue their research.

Some of the facilities available are

- a) Operating Systems Lab using C/C++ Compiler software.
- b) Linux programming lab using Redhat/Fedora/ Ubuntu software
- c) Database Engineering Lab using Oracle and Werk software.
- d) Computer Programming lab which has 60 computers with Turbo C/C++ compiler and MS office packages.

e) Case tools and Web technologies Lab installed with Apache Tomcat, HTML and Selenium.

f) Compiler Design lab

g) IT work shop lab, which has 30 computers. IT mainly deals with physical components of the computer, Installation of OS, Software and Hardware trouble shooting.

Department has its own Library which helps the faculty and students to refer text books. The Department also has a repository of projects done by the students.

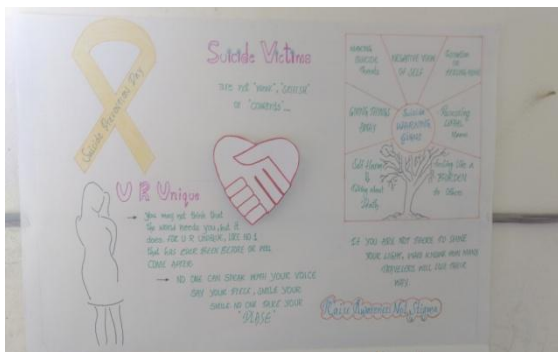
Objectives

The department of CSE is continuously making efforts to improve the teaching learning process. Various methods are used apart from the traditional chalk & talk in the class rooms. The faculty is strongly encouraged to adopt various innovative methods like using Power point presentation and audio visual representations.

Departmental Activities:

Poster Presentation:

CH. Swetha and Nawaz Sorathia from 2nd year CSE participated in poster presentation on World's Suicide Prevention Day on 11th Sep 2017.



Guest lecturers / Seminars:

- A guest lecture was conducted on C, C++ and JAVA On 06-08-17 at 10:00 AM, for the 2nd and 3rd year students of CSE by Mr. Shankar, from CMC. The Guest explained students starting from the basics of C, C++ and JAVA.

Paper publications

- S. C. Nayak**, Misra, B. B., and Behera, H. S. (2017), 'Efficient financial time series prediction with evolutionary virtual data position exploration', *Neural Computing and Applications*, <https://doi.org/10.1007/s00521-017-3061-1>, Springer
- S. C. Nayak** (2017), 'Development and Performance Evaluation of Adaptive Hybrid Higher Order Neural Networks for Exchange Rate Prediction', *International Journal of Intelligent Systems and Applications (IJISA)*, Vol. 9, No. 8, pp. 71-85, MECS.
- K. K. Sahu, **S. C. Nayak**, and H. S. Behera, "An integrated CRO and Pi-Sigma neural network based forecasting model for financial time series with virtual data positions" International Conference on Artificial Intelligence and Evolutionary Computations in Engineering Systems (ICAIECES-2017) held at MIT, AP, Springer, June 2017. (Best Paper Award)
- A.K. Behera, **S. C. Nayak**, S. K. Dash, S. Dehuri, M. Panda, 'Improving Software Reliability Prediction Accuracy Using CRO based FLANN', 5th - International Conference on Innovations in Computer Science & Engineering

(ICICSE-2017) held at GNITC, Hyderabad, Augst 2017, **Springer**.

5. **S. C. Nayak**, B. B. Misra& H. S. Behera, "Escalation of prediction accuracy with virtual data: A case study on financial time series", *Modeling, Analysis, and Applications of Metaheuristic*, 2017, **IGI Global**.
6. S. K. Dash, A. K. Behera&**S. C. Nayak**, "DE based RBFNs for Classification with Special Attention to Noise Removal and Irrelevant Features", *Modelling, Analysis, and Applications of Metaheuristic*, 2017, **IGI Global**.
7. **S. C. Nayak**, B. B. Misra& H. S. Behera, "On Developing and Performance Evaluation of Adaptive Second Order Neural Network with GA based Training (ASONN-GA) for Financial Time Series Prediction, 2017, *Advances in Applied Metaheuristic Computing*, **IGI Global**.

Student Achievements

K. BindhuPriya from 2nd year CSE bearing Roll no: 15RA1AO513 gained aggregate 69.1%.



VikramPareek form 1st Year CSE bearing Roll no: 16RA1A0553 gained GPA 9 .



Up Coming Events

- Industrial visits for 2nd, 3rd and 4th year CSE students along with staff.
- Planning for Guest lectures and Seminars on new trends and techniques.
- Planning to organise FDP for faculty members.
- Workshops and Technical fest is going to be organising by CSE department for coming semester.