Newsletter
January to June 2017
Volume 2, Issue 2

In this issue

- Vision and Mission
- Faculty publications
- List of workshops/seminars/conferences attended by faculty
- Library
- Alumni
- Training and Placement Details
- Technical write-ups
- Student Innovations
Vision
The Computer Science and Engineering Department aims to produce competent professionals with strong analytical skills, technical skills, research aptitude and ethical values.

Mission
To provide hands-on-experience and problem-solving skills by imparting quality education.

To conduct skill-development programs in emerging technologies to serve the needs of industry, society and scientific community.

To promote comprehensive education and professional development for effective teaching-learning processes.

To impart project management skills with an attitude for life-long learning with ethical values.
Welcome and best wishes to all friends of the department who receive this newsletter. It has been an interesting and busy semester for the members of the department.

It gives me great opportunity to present the second issue of ‘Moonlit’ for the academic year 2016-17. This internal newsletter is one of the ways in which we can disseminate information on the life of the department. The past semester was full of various activities by the students and the faculty in academic, co-curricular, extracurricular as well as research and development. As you read through the pages you will realize that the department had a particularly successful semester.

I would like to thank all my colleagues for their tireless efforts to help the department progress at a very steady pace.

The Department of Computer Science and Engineering has recorded consistent improvement in its academic, research and placement performance. My hearty congratulations to the CSE association for coming out with newsletter ‘Moonlit’ in the second consecutive year.

Dr. G. SHYAMA CHANDRA PRASAD  
Associate Professor  
MTech, Ph.D. 

“Life is a box of neural networks, you never know what you are going to get”

- “Explore the Potential Impact of Big Data Challenges, Open Research Issues and various Tools Associated” in International Journal of Innovative Research in Science, Engineering and Technology, ISSN: 2319-8753, June 2017

- “Extended Radial Network for Spectral Neuro Approach In Pattern Recognition” International Journal of Engineering Trends and Technology (IJETT), ISSN: 2231-5381, April 2017


Dr. K. Sunil Manohar Reddy  
Assistant Professor  
MTech, Ph.D. 

“That an engineer need only be pragmatic and not whimsical is a misconception.”


- “Cloud Testing – Types, Benefits and Challenges” in International Journal of Engineering Trends and Technology, ISSN:2231-5381, Special Issue, Pg 123-127,April 2017

Mr. L. Raghavendar Raju  
Assistant Professor  
MTech, (Ph.D.)

“A language that doesn't affect the way you think about programming is not worth knowing”

- “Quality of Services (QoS) and Security Issues in Mobile Ad Hoc Networks (MANETs) – A Review” in World Wide Journal of Multidisciplinary Research and Development, ISSN: 2454-6615, Vol.3 Issue 11, Nov 2017, Impact Factor MJIF:4.25, Indexed by ICI, approved by UGC.


Mrs M Priyanka  
Assistant Professor  
MTech


Mr. M. Praveen Kumar  
Assistant Professor  
MTech

“Everything that can be automated will be automated”

- “Smart Bin for Smart Homes (An IoT Based Application)” in 7th International conference on Recent Engineering & Technology 2017, on April 2017.


Mr. A Pramod Kumar  
Assistant Professor  
MTech


List of Workshops/ Seminars/ Conferences attended by faculty

**Dr. G. Shyama Chandra Prasad**  
Associate Professor

- Java Fundamentals and Java Programming, Sree Data Engineering College, Hyderabad from 30-01-2017 to 03-02-2017

**Mr. L. Raghavendar Raju**  
Assistant Professor


**Mrs. J. Samatha**  
Assistant professor

- A Survey on Social Media Analytics tools for business Intelligence, at IJSRD, February 2017.
- Java Fundamentals and Java Programming, Sree Datha Engineering College, Hyderabad from 30/01/17 to 3/02/17.

**Mrs. K. Bhagya Laxmi**  
Assistant professor

- Software Engineering and Testing Methodologies at SVIT, Secunderabad from 28/1/17 to 2/2/17.

**Dr. K. Sunil Manohar Reddy**  
Assistant professor

- A Survey on Social Media Analytics tools for business Intelligence, at IJSRD, February 2017.
- Java Fundamentals and Java Programming, Sree Datha Engineering College, Hyderabad from 30/01/17 to 3/02/17.
List of Workshops/ Seminars/ Conferences

Java Fundamentals and Java Programming, Sree Datha Engineering College, Hyderabad from 30/01/17 to 3/02/17.

A Research on Simple way to a private cloud audits uses, IJRET, January 2017.

Mrs. M. Priyanka  
Assistant professor

Java Fundamentals and Java Programming, Sree Datha Engineering College, Hyderabad from 30/01/17 to 3/02/17.

A Research on Simple way to a private cloud audits uses, IJRET, January 2017.

Mr. M. Praveen Kumar  
Assistant professor

Java Fundamentals and Java Programming, Sree Datha Engineering College, Hyderabad from 30/01/17 to 3/02/17.

Database Design and Programming with SQL, ACE, Hyderabad from 17/01/17 to 21/01/17.

Mr. V. Vinay Kumar  
Assistant professor

Library

The Library is computerized and computerized services are provided to its readers. It is fully equipped with necessary infrastructure, manpower to provide improved Library services to the users. It is maintained by well-versed and fully qualified staff. They are fully conversant with the holdings of the section and also, they are fully acquainted with the reference materials available in the reference section. They guide the readers to find out the requisite materials and they also provide requisite information efficiently.

The Library is a consortium of technical journals. It provides

- American Society of Civil Engineers (ASCE)
- American Society of Mechanical Engineers (ASME)
- Association of Computing Machinery (ACM)
- Institute of Educational Leadership (IEL)
- Institute of Electrical and Electronics Engineers (IEEE)

and other foreign journals articles to Member Libraries as and when required.
Alumni

Alumni are an integral and a prestigious part of our educational heritage. Hence to strengthen that heritage Alumni meet was organized so as to celebrate their accomplishments by giving them the due recognition they deserve and to have them share their enlightenment experience with others.

Speeches, interviews, discussions were conducted and students milled around to chat with the professors. It had been a great delight to see MECS students marking their way to success in various companies. Our institute has always pushed against the norms to set new and better standards. Our journey to learn, grow and contribute continues as students’ progress towards perfection. It is therefore important to protect that legacy and we value their contributions and we owe to their results which are but a catalyst for the growth of this institution and we hope to see that such meets remain a regular feature in the future to generate inspiration encouragement and to. Maintain a thriving community. We also hope that they keep in contact with their alumnus and their inputs and visits will always be appreciated.

Training and Placement cell

The Training and Placement Cell was established in the year 2013 with Mr Ch Rajani Prashanth as Training and Placement Coordinator. It organizes programs like Group Discussion (GDs), Mock Interviews and guest lectures on Employability skills and Aptitude tests on regular basis. It plays a pivotal role in counselling and guiding the students for their successful career placement. The goal of the cell is to provide continuous training and employment opportunities to the students.

Many other students are pursuing higher studies in Universities like University of Texas, University of Utah, University of Cincinnati, Florida State University, Fairleigh Dickinson University, Fairleigh Dickinson University, California State University.

Training programs organized:

We have been partnering with the following organizations and have taken initiatives to improve the employability of students.

1. IEEE-Forum Hyderabad Section-Skill Connect Programme is being run for all BE students.
2. Vivekananda Institute of Human Excellence, Ramakrishna Math, Hyderabad- For personality development and soft skill classes for all BE students.
3. Partnering with Telangana Academy for Skills and Knowledge (TASK).
4. For training including certification courses for BE III/IV-year students- Oracle Academy and CISCO Networking Academy.
5. Campus Recruitment Training (CRT) on Aptitude and Attitude for BE II, III, IV students.
6. Aspiringminds.in (AMCAT), CoCubes.com & Monster- For assessments on Quantitative Aptitude, Logical Reasoning, Verbal Ability, Coding, Computer Fundamentals for all BE IV year students.

Technical Write up by student

Tech Storehouse

A tech storehouse is a software application, designed to support and optimize warehouse functionality and distribution center management. These systems facilitate management in their daily planning, organizing, staffing, directing, and controlling the utilization of available resources, to move and store materials into, within, and out of a warehouse, while supporting staff in the performance of material movement and storage in and around a warehouse. Storehouse management solutions are primarily tactical tools, purchased and used by businesses to satisfy the unique customer demand requirements of their supply chain(s) and distribution channel(s), when the inventory and workload is larger than what can be handled manually, with spreadsheets. Motivation to purchase generally comes from a need to support sales growth or improve performance, and occasionally both. Warehouse management systems can be standalone systems, part of supply chain execution suites, or modules of an enterprise resource planning (ERP) system. Depending on the size and sophistication of the organization, warehouse management can be as simple as handwritten lists or spreadsheets using software such as Microsoft Excel or Access, as well as specialty WMS software systems.

G Samitha Reddy
CSE IV/IV
Secure data from attacks

Azure Key Vault helps safeguard cryptographic keys and secrets that cloud applications and services use. Key Vault streamlines the key management process and enables you to maintain control of keys that access and encrypt your data. Developers can create keys for development and testing in minutes, and then migrate them to production keys. Security administrators can grant (and revoke) permission to keys, as needed.

You can use Key Vault to create multiple secure containers, called vaults. These vaults are backed by HSMs. Vaults help reduce the chances of accidental loss of security information by centralizing the storage of application secrets. Key vaults also control and log the access to anything stored in them. Azure Key Vault can handle requesting and renewing Transport Layer Security (TLS) certificates. It provides features for a robust solution for certificate lifecycle management.

Azure Key Vault is designed to support application keys and secrets. Key Vault is not intended to be a store for user passwords.

Following are security best practices for using Key Vault:

- Grant access to users, groups, and applications at a specific scope.
- Control what users have access to.
- Store certificates in your key vault. Your certificates are of high value.
- Ensure that you can recover a deletion of key vaults or key vault objects.

Name: K.R.C Reddy
Roll No: 1608-15-733-102
Year: BE(IV/IV)

Implementation of Genetic Algorithm

The whole algorithm can be summarized as –

1) Randomly initialize populations p
2) Determine fitness of population
3) Until convergence repeat:
   a) Select parents from population
   b) Crossover and generate new population
   c) Perform mutation on new population
   d) Calculate fitness for new population

Genetic Algorithms (GAs) are adaptive heuristic search algorithms that belong to the larger part of evolutionary algorithms. Genetic algorithms are based on the ideas of natural selection and genetics. These are intelligent exploitation of random search provided with historical data to direct the search into the region of better performance in solution space. They are commonly used to generate high-quality solutions for optimization problems and search problems.

Genetic algorithms simulate the process of natural selection which means those species who can adapt to changes in their environment are able to survive and reproduce and go to next generation. In simple words, they simulate “survival of the fittest” among individual of consecutive generation for solving a problem. Each generation consist of a population of individuals and each individual represents a point in search space and possible solution. Each individual is represented as a string of character/integer/float/bits. This string is analogous to the Chromosome.

Foundation of Genetic Algorithms

Genetic algorithms are based on an analogy with genetic structure and behavior of chromosome of the population. Following is the foundation of GAs based on this analogy –

1. Individual in population compete for resources and mate
2. Those individuals who are successful (fittest) then mate to create more offspring than others
3. Genes from “fittest” parent propagate throughout the generation, that is sometimes parents create offspring which is better than either parent.
4. Thus each successive generation is more suited for their environment.

Name: Sruthi Chakravarthy
Roll No: 1608-15-733-051
Year: BE(II/IV)
Formed in 1965, the CSI has been instrumental in guiding the Indian IT industry down the right path since its formative years. Today, the CSI has 70 chapters all over India, 418 student branches, and more than 90000 members including India's most famous IT industry leaders, brilliant scientists and dedicated academicians.

The mission of the CSI is to facilitate research, knowledge sharing, learning and career enhancement for all categories of IT professionals, while simultaneously inspiring and nurturing new entrants into the industry and helping them to integrate into the IT community. The CSI is also working closely with other industry associations, government bodies and academia to ensure that the benefits of IT advancement ultimately percolate down to every single citizen of India.

The National Level Techfest Dhruvamedha has been conducted in coordination with the Computer Society of India.