Department of Computer Science and Engineering

MOONLIT
Academic Newsletter

Newsletter
January to June 2017
Volume 2, Issue 2

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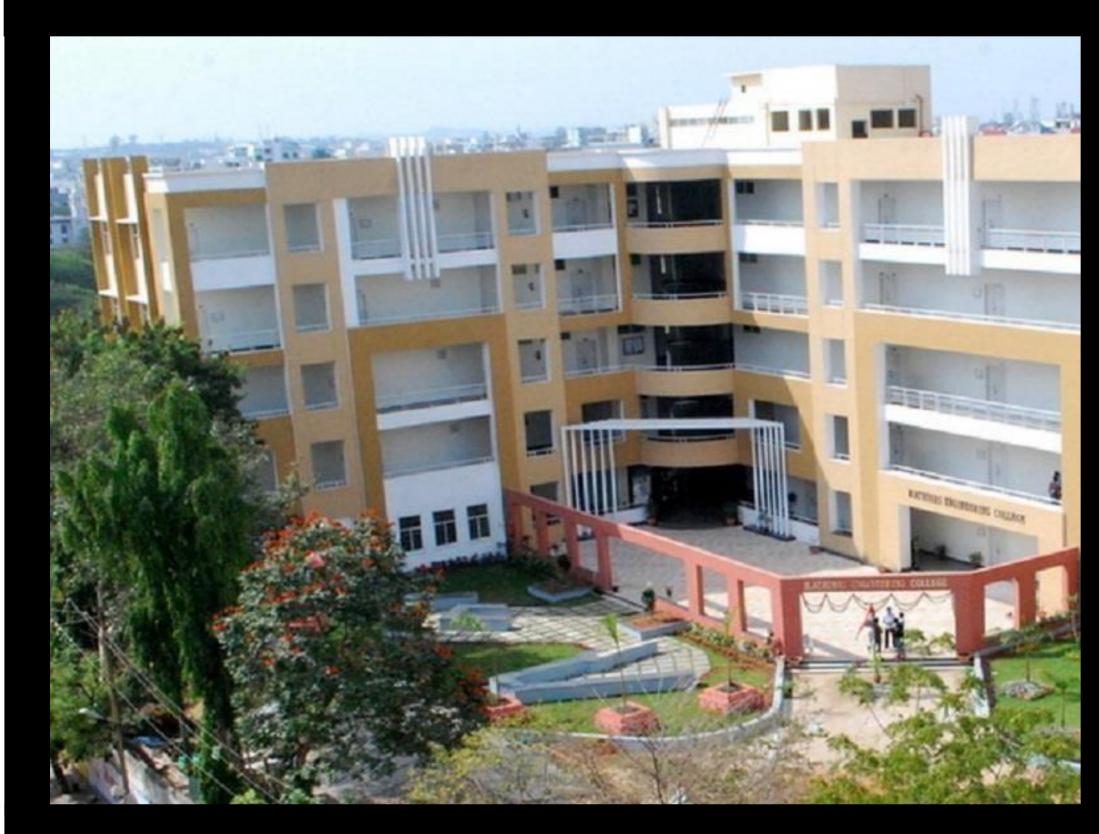- ❖ Technical write-ups
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Matrusri Engineering College (sponsored by:MATRUSRI EDUCATION SOCIETY,Estd: 1980) (Approved by AICTE,Affiliated to Osmania University)
16-1-486,Saidabad,Hyderabad-500059, Ph:040-24072764
Email:matrusri.pricipal@gmail.com,www.matrusri.edu.in

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.

Word from Head of the Department

G. VEERESHALINGAM
Professor,
MTech (IIT Delhi), (Ph.D.)

"Combine Computing power with passion."

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.

Word from the Faculty

Dr. P. VIJAYA PAL REDDY
Professor,
MTech, Ph.D.
"Machines are dumb. So, we are trying to make them less dumb."

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.

o "**Message polarity classification using Recurrent Neural Networks with word embeddings**", International Journal of Current Engineering and Scientific Research, volume 4, Issue 7, 2017 – UGC indexed

o "**Including category information as supplements in latent semantic analysis of Hindi documents**", Int. J. Computational Science and Engineering, Vol. 15, Nos. 1/2, 2017 – Scopus indexed.

o "**Topic based Message classification and quantification using Recurrent Neural Networks Learning System for Sentiment Detection on Twitter**", International Journal of Technology and Engineering Science, Volume 5[1], pp: 9010-9013, January 2017.

o **"N-gram approach for gender prediction**", 2017 IEEE 7th International Advance Computing Conference – Scopus indexed.

o "**A Document Weighted Approach for Gender and Age Prediction Based on Term Weight Measure**", IJE TRANSACTIONS B: Applications Vol. 30, No. 5, (May 2017) - Scopus indexed.

o **"Single Text Document Summarization using Statistical, Semantic and Syntactic Features**", IEEE International Conference on Computing for Sustainable Global Development, 01st - 03rd. March, 2017 – Scopus indexed.

Word from the Faculty

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"

o **"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

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

o **"Extended Radial Network for Spectral Neuro Approach In Pattern Recognition** "6Th National Conference on Emerging and Innovative Trends in Computer Science, Organized by Vasavi College of engineering, Hyderabad 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."

o " **Cross Layered Strategy for Back Pressure Controlled QOS Aware Routing In Manets**" in Asian Journal of Computer Science And Information Technology, ISSN: 2319-8753, Volume: 7, Issue: 3, June-July 2017.

• **" The Realm of Social Sentiment Analysis on Big Data**" in International Journal of Engineering Trends and Technology, ISSN: 0976-5697, Volume: 8, Issue: 5, May-June,2017.

• **"Importance of Inspections in Software Quality Assurance"** in International Journal of Modern Trends in Engineering and Science, ISSN: 2348-3121, Volume-4, Issue- 3,Pg 87-89, March 2017

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

• **"The Dominion of Software Quality Assurance**" in International Journal of Modern Trends in Engineering and Science ,ISSN: 2348-3121, Volume-4, Issue- 6, Pg 34-36, June 2017.

Word from the Faculty

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"

o **"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.

o **"A Key Exchange Approach for Proficient and Secure Routing in Mobile Ad hoc Networks"** in International Journal of Interactive Mobile Technologies(iJIM), iJIM – Vol. 11, No. 4, 2017, doi.org/10.3991/ijim.v11i4.6440, indexed by DBLP & SCOPUS.

Mrs M Priyanka
Assistant Professor
MTech

o "**A Research on Simple way to a Private Cloud**" in IRJET Journal, Volume 4 Issue 1, January 2017.

Word from the Faculty

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.

- **"A Survey on Hybrid Cloud Management Platform and its Contemporary Enterprise Applications"** in IJIRCCE, Volume 5, Issue 3, March 2017.

Mr. A Pramod Kumar
Assistant Professor
MTech

o "**A New Approach for Secure Traffic Data Analytics using Hadoop**" International Journal of Research / e-ISSN: 2348-6848 p-ISSN: 2348-795X Volume 04 Issue 08 July 2017.

o "**Privacy-Aware Public Auditing System for Shared Cloud Data with Dynamic Groups**" December 2017 | IJIRT | Volume 4 Issue 7 | ISSN: 2349-6002 IJIRT 145085 International Journal of Innovative Research In Technology 253-257.

List of Workshops/ Seminars/ Conferences attended by faculty

Dr.G.Shyama Chandra Prasad
Associate Professor

Extended Radial Network for Spectral Neuro Approach in Pattern Recognition, 6th National Conference on engineering and innovative trends in Computer Science Hyderabad, March 2017.

CISCO Networking Academy Instructor Conference, Hyderabad, February 2017.

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

A Key Exchange Approach for Proficient and Secure Routing in MANETs, IJIM, DBLP & Scopus Indexed, March 2017.

Survey on Routing Protocols and QoS in MANETs, IJST Scopus Indexed, March 2017.

Mr. L.Raghavendar Raju
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

List of Workshops/ Seminars/ Conferences attended by faculty

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. J. Samatha
Assistant professor

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

Trends of Process Models in Software Engineering at International Journal of Research in Computer Science, February 2017.

Multiple Data Stores Usage in Cloud Computing, at International Journal of Modern Trends in Engineering and Science, February 2017.

JPEG Image Compression using Different Techniques, at International Journal of Advanced Research in Science, Engineering and Technology, February 2017.

Mutual Load Distribution Model to Enhance Profitability in Multi Tenancy, at International Journal of Research in Computer Science, February 2017.

Comparison of Various Face Recognition Algorithms International Journal of Advanced Research in Science, Engineering and Technology, February 2017.

Dr. K. Sunil Manohar Reddy
Assistant professor

List of Workshops/ Seminars/ Conferences

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

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

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

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

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 enlightening experience with others.

To say the day was a success is an understatement, we were warmly surprised by the turnout. 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.

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 Samhitha Reddy
CSE IV/IV

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.

The recently graduated batch of under-graduates from the Engineering disciplines have been placed in some of the leading national and international companies & institutions including: Amazon, Amazon development Centre, Nvidia Graphic LTD, Tech Mahindra, Wipro technologies, GGK Technologies, Kony India, Enter Pi, Fission Labs, Spoors technologies, IMI Mobile, Dilytics Technologies Pvt. Ltd., Rain Cloud, TCS, Cognizant, Cocubes, Cadvision, Capgemini; to name a few.

A number of our students have been accepted into leading international institutions such as Florida State University, University of Utah, University of Texas, University of Cincinnati, Fairleigh Dickinson University are among others for pursuing post-graduate studies.

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, 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.

Secure data from attacks

Implementation of Genetic Algorithm

The whole algorithm can be summarized as –

1) Randomly initialize populations p
2) Determine fitness of population
3) Untill 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

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.

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

NameSruthi Chakravarthy
Roll No: 1608-15-733-051
Year : BE(II/IV)

Computer Society of India

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.

Student Participation

S.No.	Name	Class	Event	Dates	Institute/ Venue
1	Pola Divya	CSE IV/IV	Anveshana	22/05/17	Anveshana-Hyderabad
2	Y.Manasa	CSE III/IV	Data Science with R, Skillfirst-2017	23/02/17 25/02/17	Matrusri Engineering College
3	Sai sravani Maturi	CSE III/IV	Street Cause	2016-17	Street Cause Enforce
4	A.Akarsha Reddy	CSE III/IV	Advanced Memory System Architecture, TLC	04/03/17	IIT Hyderabad
5	V.Anusha	CSE IV/IV	Anveshana	22/05/17	Anveshana-Hyderabad
6	A.Sai Sri	CSE III/IV	Data Science with R, Skillfirst-2017	23/02/17 25/02/17	Matrusri Engineering College
7	A.Mrudula Reddy	CSE III/IV	Advanced Memory System Architecture, TLC	04/03/17	IIT Hyderabad
8	N.Priyanka	CSE III/IV	Tech Hunt, Fusion 2017	03/03/17-04/03/17	MVSR Engineering College
9	Ravali Alle	CSE III/IV	Project based Workshop on" Machine Learning"	05/08/16 06/08/16	Matrusri Engineering College
10	A.Swetha	CSE III/IV	Tech Hunt, Fusion 2017	03/03/17-04/03/17	MVSR Engineering College
11	A.Sai Sri	CSE III/IV	Paper Presentation, Fusion 2017	03/03/17-04/03/17	MVSR Engineering College
12	A.Sai Sri	CSE III/IV	Dhruvamedha-2k16	05/10/16	Matrusri Engineering College
13	Gummadavalli Monika	CSE III/IV	Data Science with R	23/02/17 25/02/17	Skillfirst-2017 at MEC
14	Y.Monika	CSE III/IV	Dhruvamedha-2k16	05/10/16	Matrusri Engg College
15	Kadaveru Nikhil	CSE IV/IV	DRDO Training	03/05/17	DRDO Hyderabad