

SILICON MAGIC

Department of Computer Science & Engineering

Volume 2, Issue 3

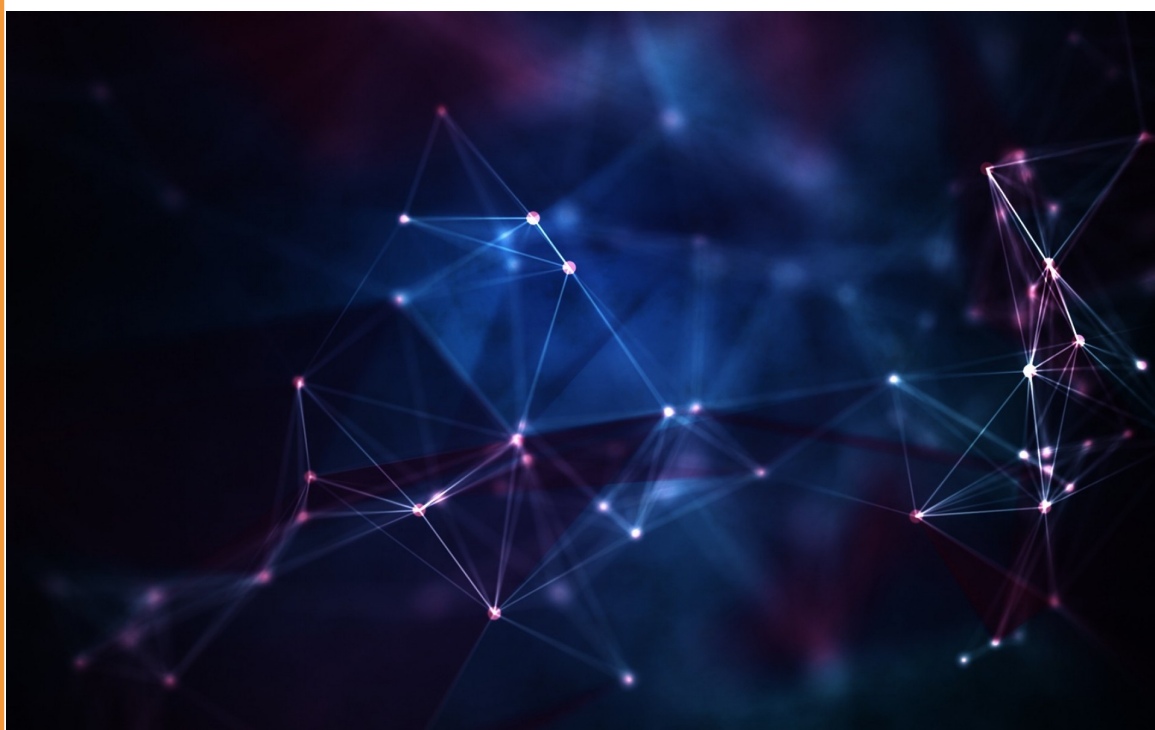
April, 2017

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Faculty editor

Ms. N. Jeba, AP/CSE

Ms. S. J. Syed Ali Fathima, AP/CSE

Student editor

Mr. D. Gopinath, III CSE A

Ms. Gopika Harini, III CSE A

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Basic computer training program for school students

Ms. D. Sathya, AP-II/CSE, Ms. P. Betty, AP/CSE, Ms. D. Yamunathangam, AP/CSE organized a workshop to impart awareness about the effective usage of computer applications and e-services to middle school children at Udayampalayam village, Coimbatore. The workshop was conducted extensively for three days from January 30 to February 1, 2017.



Ms D. Sathya teaching the students about MS Office



Ms P. Betty answers questions about The Internet



Ms D. Yamunathangam teaching the students.

On the first day of the session, Ms. D. Sathya presented on “The Importance of computer services and MS Office package”. The students were very interactive and gained knowledge. On the second day, Ms. P. Betty taught the students about “Mobile applications and Internet usage” This session enabled the students to see how powerful and educational the Internet could be. On the final day of the session, Ms. D. Yamunathangam covered topics on “Safe Social Media usage and digital transactions using ecommerce applica-



Internet of Things

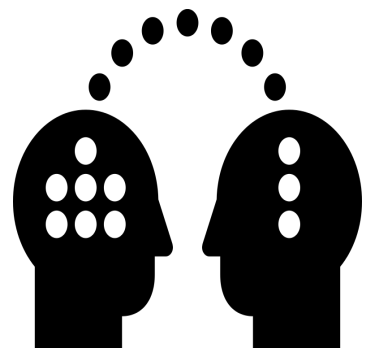
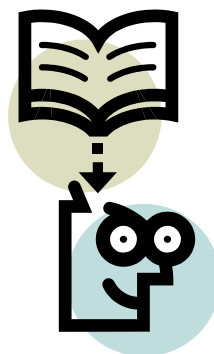
“Staying updated with technology is easier than ever at the Department of Computer Science & Engineering with workshops and activities.”

Urban Planning and Building Smart Cities based on IoT using Big Data Analytics

The seminar on “Urban Planning and Building Smart Cities based on IoT using Big Data Analytics” was conducted on February 15, 2017. The resource person Dr. Anand Paul, Associate Professor, The School of Computer Science and Engineering, Kyungpook National University, South Korea gave a brief insight about the latest research advances in the field of Internet of Things (IoT) to both faculty and students. Ms. D. Sathya, AP-II/CSE and Ms. S. Nithyaroopu, AP/CSE coordinated the seminar.



The audience listens as Dr. Anand Paul talks about IoT



Parent-Teacher meeting



The department of CSE organized the Parent-Teacher meeting for the even semester on March 4, 2017. The objective of the meet was to familiarize and update the activities carried out in the department/college, create an awareness in parents about the progress of their wards and to get valuable suggestions from the parents for further improvements and to schedule regular meetings with the faculty members. Fifty parents attended the meeting and showed keen interest in getting to know about the performance of their wards and the role of the department.

One credit course on Ethical Hacking



Mr. Krishna Sharma teaching the students

The students of III CSE were benefitted by attending a course on Ethical Hacking presented by Mr. Krishna Sharma, a Cyber Security Researcher from CyberX Securities. The one credit course was conducted from March 6-7, 2017. The session was coordinated by Mr. G.S. Nandakumar, ASP/CSE. Thirty nine students from III CSE attended the sessions. The speaker shared various issues related to Cyber Security with interesting live demonstrations. He taught about Digital Rights and Privacy. The students later took a final assessment exam and they were awarded credits based on their performance.

**“National level
workshops with
interesting
technological
advances!”
- Students**

The Department of Computer Science and Engineering organized a three day “National Level Hands On Workshop on Internet of Things” from March 8 – 10, 2017. The objective of the workshop was to provide hands on training in Arduino and Raspberry Pi to develop engineering applications. 48 participants attended the workshop which comprised of 25 external and 23 internal participants respectively.



Mr. M. Selvaraju, Director -HandsOn Technologies, Coimbatore was the guest speaker for the inauguration. He delivered a very thought provoking lecture on developing embedded applications for internet of things. Moreover he emphasized

Dr. V. Vanitha, Professor/CSE introduced the participants to the world of Arduino Programming with certain basic applications. Ms. V. P. Sumathi, AP-SRG, Ms. D. Aswini, AP/CSE and Ms. X. Francis Jency, AP/CSE elaborated on the working of fundamental sensors for various application development. The second day of the workshop explored into interfacing Arduino with modules and shields and developing web based applications by Ms.D.Aswini,AP/CSE and Ms.X.Francis Jency, AP/CSE.

The afternoon session of the workshop focused on Raspberry Pi introduction and Python Programming by Dr. V. Vanitha, Professor/CSE and Ms. V. P. Sumathi, AP-SRG.

The third day of the workshop began with handling sensors, files and camera interfacing in Raspberry Pi by Dr. V. Vanitha, Professor/CSE. A demo on home automation was projected by Mr. Aravinth, Final CSE, which was an inspiration to many participants.



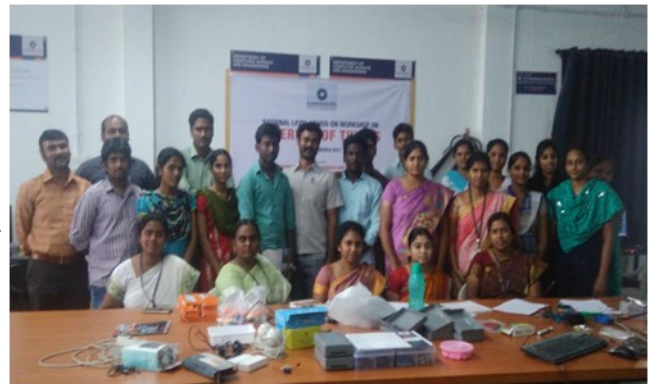
Home Automation Demo by Mr. Aravinth,
Final CSE

Ms. N. Jeba, AP/CSE handled sessions on communication from Raspberry Pi through SMS and Emails, Weather Updates and Working with Social Media. All the sessions were fruitful by active participation, continuous queries and

doubt clearing sessions. The participants were motivated to begin developing simple applications and projects which would be of use to the society.

Feedback on the workshop was collected through the online portal and was found to be positive. All the participants were satisfied for enabling them to explore into application development in internet of things. Certificates were distributed to all the participants

and the workshop came to an end having imparted technical knowledge along with hands on training.



Participants along with the resource persons

Seminar on Network security & Ethical Hacking

An awareness seminar on Security essentials and Ethical Hacking was organized for II CSE students on March 10, 2017. The session was handled by Mr. S. Sankar Raj, Certified Ethical Hacker, Director-Training & Development, Prompt Infotech, Coimbatore. Dr. L. Latha, ASP/CSE coordinated the session.



Mr. S. Sankar Raju interacting with the students



Mr. Senthil Kumar, TP/CEO of Placement season talks to the students about various opportunities



The audience listening to the presenters of Career Day-2017.

Career Day-2017

A one day Career awareness programme was organized exclusively for third year CSE, IT and MCA students on March 13, 2017. The purpose of the event was to help students to get an insight into various career opportunities and challenges they face after their graduation. Two hundred and twenty students attended this session. Mr. Koushik Rajendran, MD, Sphata System and Mr. Senthil Kumar, TP/CEO of Placement Season armed the students with lots of information regarding placements, product and service companies etc., The session was coordinated by Mr. V. Senthil Kumar, AP/CSE and Dr. Geetha, Professor & HoD/ MCA.

Guest lecture on Infrastack Labs and Public Cloud



Mr. Ajith Narayanan interacts with the students.

Mr. Ajith Narayanan, Chief Technology Officer, Infrastack Labs, Bengaluru delivered a guest lecture on March 13, 2017. Second year CSE students attended the seminar. The speaker shared his experiences with the industry. He also gave his ideas on the importance of the Cloud in recent times. The session was made interesting through live demonstrations of the cloud. The session was coordinated by Mr. G.S. Nandakumar, ASP/ CSE.

National conference on Computing perspectives on Smart city



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DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING

Request the pleasure of your presence for the

**NATIONAL CONFERENCE
ON**

**COMPUTING
PERSPECTIVES
ON SMART CITY**

at 9.15 am on Saturday, 18th March 2017
Venue: Admin Building, Seminar hall - 'D', KCT

CHIEF GUEST
Mr. Padmanabhan Gopalan
Social Entrepreneur, Founder - No Food Waste,
Edu dharama.com, SPICE Foundation

SPECIAL ADDRESS BY
Dr. R. S. KUMAR
Principal, KCT

The Department of Computer Science and Engineering organized a national level conference on “Computing Perspectives on Smart City” on 18.02.2016 and two pre-conference workshops on IoT and Hadoop on 17.03.2017. Twenty external participants attended the pre conference workshop and were motivated to begin project implementations in IoT and Hadoop.

The objective of the conference was to provide a forum for researchers and practitioners to present their contributions related to “Computing Perspectives on Smart City”. This conference addressed various computational issues involved in building smart cities and the solutions to overcome it.

On March 18, 2017 a formal inauguration function was organized in Swami Vivekananda hall. During the inauguration, Dr. P. Devaki, HoD/CSE, welcomed the participants of various institutions and the audience. Dr. V. Vanitha, Professor/CSE, spoke about the importance of the conference on smart city implementation. The chief guest Mr. Padmanabhan Gopalan, who is a young entrepreneur and social worker, delivered a key note speech on smart cities. The concept of smart city includes various aspects such as environmental sustainability, social sustainability; regional competitiveness, natural resources management, cyber security, and improvement of quality of life. Ms. S. Rajini, ASP/CSE, proposed the vote of thanks. Papers from the domain of Artificial Intelligence and Expert Systems, Wireless Sensor Networks, Big Data Analytics, Cloud Computing, Internet of Things, Cyber-security, Social Computing and Smart City Applications were presented by the concerned authors. Totally sixty papers from students of various institutions were received. Thirty papers were selected for presentation after review by the domain experts. The session chairs Dr. D. Chandrakala Professor/CSE, Dr. L. Latha ASP/CSE, Dr. N. Suganthi ASP/IT, Dr. J. Cynthia ASP/IT, Mr. G.S. Nandakumar ASP/CSE and Mr. U. Thiruvazhi AP-III/CSE, evaluated the presentations.



Mr. Padmanabhan Gopalan delivering the keynote address



Audience listening to various presentations

Signing of MoU with Infrastack Labs, Bengaluru

MoU between CSE Department and InfraStack-Labs, Bengaluru was signed on 30.3.2017 by Dr. P. Devaki, HoD/CSE and Mr. Ajith Narayanan, CTO/ InfraStack-Labs with the following objectives.

- Empowering students with latest technologies that InfraStack-Labs is working on by providing trainings, hands-on workshops and real time direct industry projects.
- Internship for selected students from CSE-KCT to work on real-time projects of InfraStack-Labs.
- Setting up a private cloud for CSE-KCT at a mutually agreed project cost.
- Both partners can jointly work on real-time projects in the field of Cloud Computing, High Performance Computing & Internet of Things (IoT).



The Department of CSE signs an MoU with Infrastack Labs, Bengaluru.

Technical discussion with Tel Aviv University (TAU) Professor

The international Project Office of KCT designated Dr. P. Devaki, HoD/ CSE and team formulated by her to have a technical discussion with Prof. Yair Beery, Faculty of Engineering, School of Electrical Engineering, TAU and plan for collaborations with TAU. Though the initial focus specified by International Project Office of KCT was cyber security, after having a look at the profile of the Prof. Yair Beery, the initial team comprising faculty working on information security was expanded to include faculty working on information coding, communication, machine learning and Artificial Intelligence from the department of Computer Science and Engineering, Information Technology, Electronics and Communication Engineering for technical discussions. Prof. Yair Beery had discussions on specific focus areas including information security, taken up by KCT and in addition to question - answer session and comments on specific projects. He suggested to identify and take up one to one discussion with corresponding faculty at TAU.



Technical Discussion with Prof. Yair Beery, TAU

Faculty Corner

1. Mr. G.S. Nandakumar has attended an FDP on New paradigms in Software Engineering at SKCET on January 30, 2017.
2. Dr. L. Latha has attended a short term course on “Cyber crime and Forensic tools through ICT” at Mepco Schlenk Engineering College, Sivakasi from February 6-10, 2017.
3. Dr. V. Vanitha , Ms. D. Aswini and Ms. X. Francis Jency and attended a National Level workshop on Internet of Things (IoT) for Emerging Engineering Applications in Smart City Implementations at PSG College of Technology, Coimbatore from February 9-11, 2017.
4. Ms. M. Suguna and Ms. G. Shobana attended an STTP on Big data and IoT at Thiyagaraja College of Engineering from February 17-21, 2017.
5. Ms. S.J. Syed Ali Fathima has attended a workshop on Virtual Reality/ Augmented Reality at CEG, Guindy, Chennai from February 27-28, 2017
6. Ms. N. Jeba has attended an FDP on Internet of Things at Coimbatore Institute of Technology, Coimbatore from March 1-7, 2017.

Faculty as Resource Persons

1. Dr. V. Vanitha, Ms. D. Aswini, Ms. X. Francis Jency and Ms. N. Jeba trained students in a national level workshop on IoT and its Applications at Sri Venkateswara College of Engineering, Bengaluru from January 18-21, 2017.
2. Dr. V. Vanitha delivered a lecture on Introduction to Internet of Things at SNS College of Technology on February 1, 2017.
3. Dr. V. Vanitha and Ms. V. P. Sumathi trained students in a workshop on Internet of Things at Government Arts College, Salem on March 4, 2017.

Faculty Publications

1. Betty, Dr Mohanageetha, Dr Jeena Jacob, An efficient feature extraction using CBIR, ICES 2K17, March 2017.
2. G. Kanagaraj, T. Primya, M.Kirthika, DevOps with Docker-An Overview, International Journal for Science and Research in Technology, March 2017.
3. G Selva Priya, T.Primya, V.Suresh, R.Ashwini4, G.kanagaraj, An introduction to modern Information retrieval: A brief overview, International Journal for Science and Research in Technology, Feb 2017.
4. T. Primya, G. Kanagaraj, V. Suresh, M. Krithika, Secure Authentication Scheme for Social Networking, MAT Journal, Feb 2017.
5. S.Nithya Roopa, Dr.N.Nagarajan, Unsupervised Cluster Learning and Hybrid Support Vector Machine for Feature Selection of Benchmark Dataset, International Journal of Printing,Packaging & Allied Sciences, Feb 2017.
6. S.Nithya Roopa, P.Saranya, Coupled Semi-Supervised Learning on Text Categorization, International Journal of Computer Trends and Technology, Feb 2017.
7. A.Amudhan, P.Saranya, S.Nithya Roopa, A Survey on Clustering Techniques, International Conference on Computing Technologies (ICONCT'17), March 2017.
8. K. Saranya, Sentimental analysis using ontology, Emerging trends and challenges in computer science and technology, Feb 2017.
9. K. Saranya, Machine learning techniques for ontology classification using semantic web, National conference on simulation and computing technologies NCSACT 2017, Feb 2017.

Student Publications

1. Betty, Sangeetha, A Dynamic Image Compression using Improved LZW Encoding Algorithm, International conference on advanced information and communication –ICAIC' 17, February 2017.
2. D.Aswini, N.Nisari, Nivetha, B.Vaishnavi, Power Consumption Alert System, International Research Journal of Engineering and Technology, March 2017.
3. D.Aswini, S.Santhya, T.Shri Nandheni, N.Sukirthini, Cattle Health and Environment Monitoring System, International Research Journal of Engineering and Technology, March 2017.
4. Betty, Sangeetha, A Biometric Iris Image Compression using LZW and Hybrid LZW Coding algorithm, IEEE Sponsored International Conference On Innovations In Information, Embedded And Communication Systems, March 2017.
5. Francis Jency X, Megala I, Archana Devi V, Smart bin- A Garbage Management System, National Conference on Computing and Communication in Emerging Technologies (NCCCET'17), March 2017.
6. N. Jeba, Naveena, Ragini, An Android Application for providing Information on public transportation in Coimbatore, International Conference on Recent Trends in Engineering, Science and Technology, March 2017.
7. N. Jeba, G. V. Prasath, M. Revanth, B. Vignesh, G. S. Santhosh, Online Pawn Broking System, National Conference on Computing Perspectives on smart City, March 2017.
8. S S Subha, R.Kalaiselvi, Efficient Ranked Keyword Search for Encrypted multisource data on cloud, International Conference on Breakthrough in Engineering, Science and Technology, March 2017

9. S S Subha, R.Kalaiselvi, An overview on efficient document clustering techniques, International Journal of Advanced Research in Computer Science and Software Engineering, February 2016.
10. S. Rajini, Gunavathi.M, The Various Approaches for Word Sense Disambiguation: A Survey, International Journal of Innovative Research in Technology, ISSN: 2349 – 6002, Volume 3, Issue 10, pp.28-32
11. Reminaa, Navayuga, Priyanga, Saranya, Survey on emotion classification using semantic web, International Journal of Advanced Research in Basic Engineering Sciences and Technology, March 2017.
12. Aswin Balaji, Suresh Kumar, Saranya, Mobile game development-Android, International conference on recent trends in engineering computers.information technology and applications(ICRTECITA-2017).
13. Sathya D, J Anu, M Divyadarshini, Assistive Technology for Visually Impaired people, International Journal SSRG, Feb 2017.
14. G. Shobana, Kruthiekha V,Lakshmipriya R, Product Recommendation System, International Conference on scientific research of engineering and technology, Feb 2016.
15. Shobana, Felix Sundar, Akesh kumar, Arun Prasanth, Motion Detection Surveillance System, International Conference on Recent Trends in Engineering, Science and Technology, Feb 2017.
16. M. Suguna, Muralidharan G, Nandha Kumar T, Big Data E-Health Records Management on Cloud Using MongoDB, International Conference on Recent Innovations in Engineering (ICRIE'17) , March 2017.
17. M. Suguna, R S Amirtha,P Nandhini Devi, Centralized Software Based Task Delegation System for Teams of MNC Company, International conference on advanced in science, Engineering and Management,ICASEM 2K17, March 2017.

18. Praveen M, Nithin Sundaraj, Udhayasankar, Syed Ali Fathima S J, Review on Microsoft Kinects Gesture Technology Based Robotics, 4th International Conference on Innovations in Information, Embedded and Communication Systems, March 2017.
19. Vasudevan, Vaibhav Rajai, Venkatesan, Syed Ali Fathima S J, Smart Street Light System International Intellectual convergence on Advances science and Engineering - IIASE 2017, March 2017.
20. Manju, Mythra, Krishna Priya, Uma Maheswari S, IoT Based Vehicle Tracking and Accident Detection System, International Journal of Innovative Research In Computer And Communication Engineering, March 2017.
21. Santanalakshmi, Uma Maheswari.S, Online Data Sharing Using Cloud Computing, International Conference in Emerging Trends in Engineering Technology, Science and Management (ICET-2017), March 2017.

Art Gallery



Digital Parrot by D. Gopinath, III CSE A.