

ACM INDIA CELEBRATION OF WOMEN IN COMPUTING AICWiC 2017 HOSTED BY ACM-W CHENNAI CHAPTER, SRM UNIVERSITY, KATTANKULATHUR

11th -13th September, 2017

Event Report

The **ACM India celebration of Women in Computing** – AICWiC 2017 event was hosted by ACM-W Chennai Chapter and School of Computing, SRM University. This year's AICWiC 2017 main event was arranged from 11th to 13th September 2017, was truly an occasion for empowerment of women in computing.

DAY 1: (11th September, 2017)

The day 1 of the convention experienced four important proceedings happening at various engineering colleges around in an around Chennai like:

1. The Lady Ada Programming competition Finals, SRM University Kattankulathur Campus
2. ACM-W Chapter summit, SRM University Kattankulathur Campus
3. Web App Development, REC College of Engineering, Chennai
4. Deep Learning tutorial, Department of CSE SSN College of Engineering Chennai

The Lady Ada Programming competition Finals:

The day kick started with the “The Lady Ada Programming competition Finals” for the top 10 finalists (girls) from around India. The competition had more than 1000 girls registered from all over India. The competition had 2 online rounds followed by an interview to shortlist top 10 finalists. The event was technically supported by ReliScore. The first prize of 15,000, 2nd prize of 10,000 and third prize of 5,000 for the winners.



ACM-W Chapter summit, SRM University Kattankulathur Campus:

ACM-W India organized its very first ACM-W India chapter summit during the AICWiC 2017. The Chapter meet was convened over by School of computing by SRM University in the timings



between 3 to 5 pm, with about eight ACM-W chapters representation. It was truly a podium for various ACM-W students Chapter members from SRM University (host), SSN Engineering Col, UPES- Dehradun, Guwhathi, Delhi, Pune, Chennai based student chapters to connect, share experiences and empower woman in computing. The summit had an enthusiastic discussion of procedure to start an ACM-W Chapter and the possible events that can be organized for encouraging and empowerment of women talent in the Computing society.

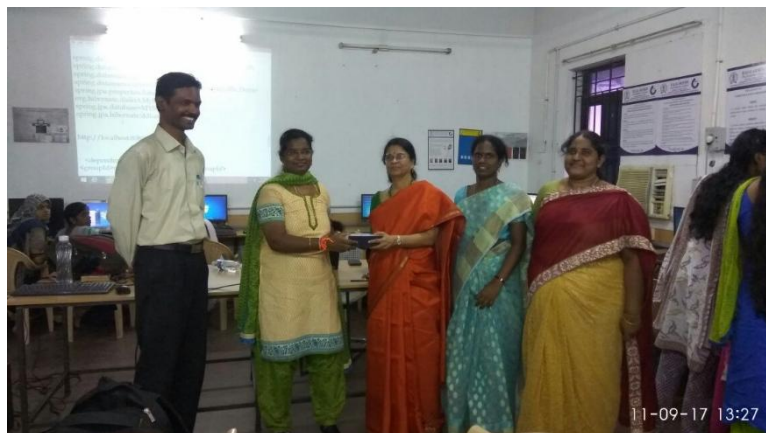
Dr. Arati M. Dixit, ACM-W India, Chair shared her thoughts and motivated the participants. There was a discussion over 101 ideas that chapters can implement. The discussion highlighted the Women in Computing history, Computer science education week, Communication workshop, Research Combining events and Peer tutoring. There was a talk on “How women empowerment can be done through ACM Women chapter” and “How can computing technology reach girls in rural areas”. Ms. Gunjan Lal, ACM-W India Executive Council member shared her experience and ACM student chapter team organization leading to last year’s ‘Best student Chapter Award’. The day concluded with the host University organizing a cultural fest treat and delicious dinner for ACM-W/student committee members and participants of AICWiC 2017.





Another was a technical session on WebApp Development by Rajalakshmi Engineering College.

Web App Development, REC College of Engineering, Chennai:



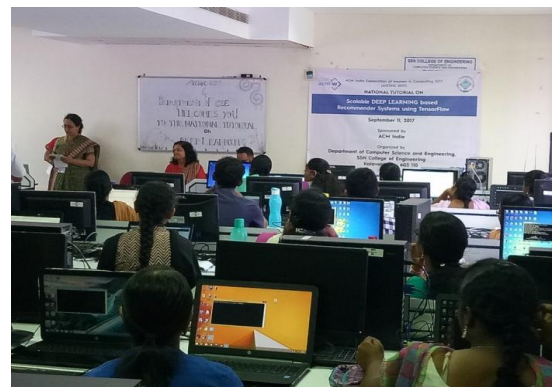
The ACM - W has organized ACM INDIA CELEBRATION OF WOMEN IN COMPUTING at Rajalakshmi Engineering College on 11th September 2017 (Monday). In this connection the Department of Computer Science and Engineering had conducted a Tutorial on Web Application Development Using Hibernate with Spring MVC for the faculty members, students and

research scholars across India on 11th September 2017 between 9 am and 2 pm. Mrs. Banu Manoharan, Technical lead in Education, Training & Assessment Unit, Infosys Ltd, conducted the tutorial for Springs MVC. Spring Boot is a tool for the development of applications using Spring framework without requiring virtually no configuration. Spring Boot is able to identify what the main characteristics of the application being developed and automatically make the necessary settings, for example, the applicationContext.xml file, web.xml and data sources. Developers earn much in productivity, focusing only on the development of the application and not the



configuration of the used tools and frameworks, Spring tool helps us to provide better performance and easy to learn. It is both front end and backend tool. Here there is no need of any html code and database connectivity. The internal working for java program was explained so clearly by the speaker along with the difference between the working of a normal java,jre and spring. All the packages and the features provided by spring tool for creating a whole project was described. The automatic integration of the class in the code and the database tables were demonstrated. In the Afternoon session, the participants had live hands on experience to install and work out with spring MVC.Participants developed a simple web based project which consist of 5 pages and the same was deployed live. Dr. Sheila Anand, Professor presented a memento to the Speaker Mrs. Banu Manoharan.

Deep Learning tutorial, SSN College of Engineering Chennai:



This tutorial was organized by the Department of Computer Science and Engineering, SSN College of Engineering Chennai. The workshop was co-ordinated by Dr.Chitra Babu, Prof. & Head, Dept. of CSE, SSN College of Engineering and Vice-Chair, ACM India Professional Chennai Chapter along with Dr.B.Prabavathy, Dr.B.Bharathi and Dr.Shomona Gracia Jacob, Asso.Profs./CSE, SSNCE.



The tutorial had an

online registration that witnessed more than 72 entries. Since registrations were confirmed on a first come first serve basis, only the first 46 registrations could be accommodated owing to the requirement of space and time available to train the participants during the hands-on sessions. The speakers at this tutorial were



Dr.Vijay Agneeswaran, Senior Director of Technology who heads data sciences team of Sapient Razorfish in India and Mr.Abishek Kumar, Manager, Data Science, Sapient Razorfish. Dr.Arati M. Dixit inaugurated the tutorial. She introduced the participants to the various spheres of ACM and encouraged the students and faculty to actively contribute to Computing. The participants gave very good feedback on the tutorial and felt that more time could have been allotted for interaction and discussion with the speakers. On the whole, it was an enlightening experience that enabled the participants to get introduced and set up the basic software environment to further explore their interests in deep learning frameworks and algorithms.

DAY 2: (12th September, 2017)



The inauguration day was held on 12th of September 2017. The inauguration function was graced by Dr. Arati Dixit, Dr. Revathi Venkatraman, Ms. Gargi Das Gupta, Dr. Sheela Anand and Dr. Chitra Babu. There was a lightening of the lamp to commemorate the beginning of event. There was a welcome address by Dr Revathi Venkatraman and presidential address by Dr.Arati Dixit, welcoming the faculty and students and giving an eye-opener session stating the need for the growth of women in computing from a pyramid to a tower level. Dr. Sheela Anand and Dr. Chitra Babu, welcomed he participants for ACM's AICWiC2017 and wished many more such events under ACM-W chapters across India. There were about 250 participants for the AICWiC 2017.





Ms Gargi B. Dasgupta, senior research manager at IBM Research, India delivered a keynote on “Cognitive Technologies and their Applications”.

There were talks about history of women and computing that celebrated informed and was supportive of the fact that women can do wonders in the field of Cognitive technologies and artificial intelligence. She focused on how from simple search engines to complex applications, enable users to book vacations, shop groceries, schedule appointments with friends and study with aided tutors, AI is everywhere. For building cognitive applications there are several technology components that need to be built. One of them is conversation capability. Chat-bots have become extremely popular in many domains.

Ms.Dasgupta talked about the technology components in conversational chat-bots that help in automated understanding of natural language queries or question understanding, automated response generation and knowledge extraction for driving the conversation. Ms. Gargi B. Dasgupta concluded with her insights on the IBM program chapter called “MAITRI”.



Dr. Arati M. Dixit, Chair, ACM-W India, delivered a talk on "Dawn of Women in Computing: A Turing Award Perspective". Women have been very much active members of the community contributing to the field of computing since its inception. The talk highlighted the historical, social, cultural and technological perspective resulting in an impressive dawn of women in computing. She did talk about the inspirational work done by the pioneer women in computing like Lady Ada, Grace Murray Hopper, Anita Borg and many mor.

Her talk focused on Women Turing award winners with an elaborate discussion of the work by Silvio Micali and Shafi Goldwasser(2012 Turing award Winners). Their transformative work that laid the complexity-theoretic foundations for the science of cryptography and in the process pioneered new methods for efficient verification of mathematical proofs in complexity theory was discussed.

Dr. Tracy Camp, Professor, The Colorado School of Mines, USA gave a Skype talk on “Implementing a Wireless Geophysical Sensor Network” (was unable to attend the AICWiC,2017 in person because of unexpected Visa Issues). Her talk focused on designing an efficient wireless sensor network capable of real-time, continuous (e.g., 500 Hz sampling rate), geophysical monitoring, which requires a more intelligent approach than a naive "sense, store, send" method. It is known that, the radio on a wireless mote platform consumes significant amounts of power; Dr.Camp suggested the utility of compressive sampling techniques to reduce radio transmissions (and save energy) in the development of a wireless geophysical sensor network. In addition to energy savings from reduced radio transmissions, compressive sampling techniques can also save energy in some applications (e.g., pollution monitoring) from reduced sensing requirements.



The presentation showed that compressive sampling is a viable option for reducing the amount of data that is both collected and transmitted in a wireless seismic sensor. Specifically, summarized the experimentation and results from the ongoing research projects. First, simulating compressive sampling on real-world seismic data containing avalanches to find the “best” combination of sparsity domain and recovery algorithm; the seismic data was collected during the winter of 2010-2011, when seven wired geophone sensors were buried in a snow slope close to an active avalanche region near Davos, Switzerland.

Poster presentation of Work in Progress (WIP) encouraging the Women researchers to present their on- going research were showcased. Post lunch session started with the **oral presentation of Work in Progress**, where women researchers from different educational institutes eagerly participated to present their research views in computing.



The evening saw the most exciting **panel discussion on Road Ahead for Women in Computing Research**. The panelists were Academicians Dr. Hema

Murthy (IIT Chennai), Dr. Arati Dixit and Industry participants Ms. Vaijayanthi Srinivasaraghavan (IBM India Pvt Ltd), Ms. Thilagah Kasipandian,(Cognizant Technologies Ltd) and Dr. Chitra Babu (Moderator). The discussion was on the comparative growth of women empowerment over the decades and how it is still much more women participation is required in field of Computing.

The winners for the The Lady Ada Programming competition and WIP Presentation were felicitated by Dr. Mukund Madhavan, President, ACM India and Dr. Arati Dixit, Chair ACM-W India.



Programming completion and WIP Winners of AICWiC 2017

The two days' event report summarizing the AICWiC 2017 events and activities was read by Ms.Vaishnavi Moorthy, Assistant Professor, SRM University followed by the valedictory event. The fruit of perseverance was rejoiced by celebrating the winners of Lady Ada Programming Contest, Work in Progress (Oral and Poster presentations) and a group photo with the winners and ACM members. The Lady Ada Programming Contest winners were-

- First Prize-Shreya Joshi(Pimpri Chinchwad College of Engg(PCCOE), Pune),
- Second Prize – R. N. Kirtana(SSN College Of Engineering, Chennai) & Shivani Junawane(PCCOE, Pune)
- Third Prize - Pooja Shah(SRM University,Kattankulathur)

The Poster Presentation Winner was R.Nandhini,(Rajalakshmi Engineering College, Chennai) & the Paper Presentation Winner was Neeta Nathani (G.H. Raisoni College of Engg., Nagpur).



Dr.M.Pushpalatha, Vice Chair ACM-W Chennai Chapter, Professor, SRM University took the stage to thank the ACM members, organizing committee members and others, who on and off the dais were responsible to make this AICWiC 2017 possible and a successful get-together celebrating women in computing .



ACM-W India Executive Council Members at AICWiC 2017!