

Embedded Technology Knowledge Workshop

15 JUNE 2018

The workshop on Embedded technology, conducted in Biswa Bangla Convention Center, New Town, Rajarhat is a part of the endeavor that Department of Information Technology and Electronics, (DIT&E), Government of West Bengal has taken, to make the State a leader in emerging technologies such as Artificial Intelligence, Fintech, Blockchain, Cyber Security, Embedded Technology and Electronics hardware manufacturing.

The event was organized by Department of IT & E, Government of West Bengal, in collaboration with West Bengal Electronics Industry Development Corporation (WBEIDC) and NASSCOM. The overall project management support is provided by the PMU team from PricewaterhouseCoopers Pvt. Ltd, attached to the Department of IT & E, Government of West Bengal.

The day long knowledge workshop provided a platform for various stakeholders including senior Government Officers, subject matter experts, eminent researchers and leaders from industries to share their knowledge on the subject. Like the earlier events, Embedded Technology Knowledge Workshop was open for students, young and experienced professionals, academicians, entrepreneurs, and industry representatives to attend and benefit from. Audience got a chance to learn from experts on a wide variety of topics ranging from “reconfigurable computing” to applications of embedded technology in fields such as automotive industry, renewable energy, sensor analytics and IoT. They also gained awareness on the Government initiatives and opportunities to collaborate with Government in the field of embedded technology.

Shri Aninda Chatterjee, MD, WBEIDC extended warm welcome to the audience on behalf of DITE. He said that considered as one of the most important next generation emerging technologies, Embedded Technology have the potential to disrupt every industry and gradually re-shape the way we interact with the world around us. Therefore the Govt. of West Bengal believe that knowledge sharing on Embedded Technology with participation from technology leaders, industry experts and academia is the need of the hour.

He invited all the dignitaries on dais i.e. Shri Debashis Sen, IAS, Addl. Chief Secretary, Department of Information Technology & Electronics, Govt. of West Bengal, Shri S. K. Bhattacharyya, IAS, Additional Secretary, Department of Information Technology & Electronics, Govt. of West Bengal, Prof. Amlan Chakrabarti, Dean, Calcutta University and Mr. Yumio Tasaka of Fujisoft Inc, who came all the way from Japan specifically for this workshop. Volunteers felicitated the eminent dignitaries on dais with flower bouquet.

Shri Debashis Sen, IAS, Addl. Chief Secretary, Department of Information Technology & Electronics, Govt. of West Bengal formally inaugurated the workshop by illuminating the inaugural lamp.

In his key note address Shri Debashis Sen, IAS said that it is a sustained effort by the Govt. of West Bengal to spread awareness in emerging areas where there is scope for development and scope for employment opportunity for new talent. He referred to his visit to Taiwan where he addressed a gathering of the Indo-Taiwanese forum and observed them mentioning that IT means India-Taiwan. What they tried to say is that India is very good at software and Taiwan is very good at hardware and therefore there is a scope for a dual symbiosis. So there is a huge opportunity in the electronics field. As the name suggests, the Department of IT & E is emphasizing on IT as well as on electronics. There is a general perception that in India there is not much of experts and skill sets on the electronics field. Therefore the Government would like to induce the young graduates and young engineers to see what are the possibilities in the area of embedded technology and in the area of electronics. Pertaining to the value chain, Bengal would like to contribute significantly and for this, the Department has already created a Hardware Park in Sonarpur, and in the process of setting up Electronics Manufacturing Clusters in Falta and in Naihati. In each of the 12 IT Parks, there is a dedicated floor for electronics and

hardware development. There is a significant space for development in the field of Embedded Technology and largely in the field of electronics for which everybody needs to understand how we should react to get this opportunity.

Referring to his visit to Computex at Taiwan, the 2nd largest exhibition in the world, he mentioned that dedicated hardware is needed for dedicated applications along with dedicated writing in the designing of this dedicated hardware or in the designing of the cryptic and precise languages that go with it. Hence there is a lot of scope and opportunities in the field of embedded technology.

After the delighting speech of Shri Debashis Sen, IAS, Prof. Amlan Chakrabarti, Dean, Calcutta University deliberated his keynote address on the topic “Reconfigurable Computing for Embedded Technologies”.

After the tea break the next session focused on Industry Perspective on Embedded Technology where industry leaders shared their views. Eminent industry leaders present in the session were Shri Venkatasubramanian M K, Senior General Manager, Robert Bosch, Dr. Kaushik Saha, CTO, Samsung, Dr. Tapas Chakravarty – Lead Scientist, Tata Consultancy Services, Mr. Yumio Tasaka of Fujisoft Inc, Shri Manik Paul, Head of Information Technology, Vikram Solar and Dr. Samir Chatterjee, Managing Director, Rebeca Technologies.

Shri Venkatasubramanian M K, Senior General Manager, Robert Bosch delivered his keynote address on the topic “Embedded Technology – key driver in Automotive industry”. Expressing his excitement he said that this is the first time he observed any Government to show this level of interest and enthusiasm in promoting this academia. He appreciated the amount of focus and interest the Govt of West Bengal is showing by organizing such workshop once in every month.

Dr. Kaushik Saha, CTO, Samsung deliberated his speech on “Swarm Intelligence System for detection of Cyber Attack on IoT Clusters”. Dr. Tapas Chakravarty – Lead Scientist, Tata Consultancy Services delivered his key note address on “Sensor analytics on embedded platforms – with emerging applications in mind”. Mr. Yumio Tasaka of Fujisoft Inc spoke on “Applications of Embedded technology in futuristic robotics”. Shri Debashis Mazumdar, Global Business Manager, Fujisoft accompanied Mr. Yumio Tasaka on dais. Shri Manik Paul, Head of Information Technology, Vikram Solar presented a speech on “Advanced embedded technology in renewable energy”. Dr. Samir Chatterjee, Managing Director, Rebeca Technologies covered the topic “Open source Embedded Software”.

The post lunch session contained the most exciting part of the workshop, i.e. the quiz on Embedded Technology. There were open questions for the audience and everyone participated in the quiz very delightfully. The quiz was conducted by quizmaster Shri Prodig Mukhopadhyay, CEO, WIL. The winners of each question were given a Medal, a gift and a Certificate.

After the brain storming quiz the next session focused on Research and development on Embedded Technology. Dr. Arijit Majumdar, Scientist, SAMEER (R&D Lab, Dept. of IT, Government of India) Kolkata delivered a speech on “Embedded System for Airborne Tracking Application”. Dr. Pranab Roy of VLSI Center, IEST deliberated on “Embedded systems: Applications and Challenges”. And Dr. Bhargab Bhattacharya, Head VLSI, ISI Kolkata narrated the topic “Application of Embedded Technology in empowerment of IoT”.

Shri Bratya Basu, Hon’ble Minister-in-Charge, Department of Information Technology & Electronics, Govt. of West Bengal arrived to the Biswa Bangla Convention Centre and Shri Debashis Sen, IAS, accompanied him to the dais. The organizers welcomed Shri Bratya Basu with flower bouquet.

This was followed by launching of Brochures of Sonarpur Hardware Park and Electronic Manufacturing Clusters at Naihati and Falta.

In his keynote address Shri Bratya Basu, Hon’ble Minister-in-Charge referred to Hon’ble Chief Minister Mamata Banerjee’s dream of a Bengal where both industry and agriculture prosper together. Bengal has rich heritage in agriculture as well as

a legacy of being one of the most industrialized state in India. Considering the fact that in West Bengal population density is 2nd highest in India. So Bengal needs suitable industry to sustain a balanced growth.

He said that with the rapid advancement of technology, the global demand for hi-tech equipment across various industries has increased. So is for commercial embedded systems ranging from MP3 players to routers and switches. Embedded system is one component of our vision to remain Bengal as the hub of Information Technology and Electronics. Upcoming Bengal Silicon Valley Hub is envisaged to attract best of global contract and talents.

Shri Suvayu Ray, Project Director, PMU summarized the takeaway of the workshop and the workshop concluded by vote of thanks given by Shri Debashis Sen, IAS, Additional Chief Secretary, Department of Information Technology & Electronics, Govt. of West Bengal.