

Proceedings of the National conference
On
“Biometrics, RFID, and emerging Technologies for Automatic Identification”
Organized
On
10th Jan 2009.
At
Vidya Prasarak Mandal’s Polytechnic, Thane

Principal, **Prof. D. K. Nayak** , Convener of conference, in the inauguration function, welcomed the guests and highlighted the genesis of the conference .He mentioned that the conference was convened to create awareness in the society regarding the emerging field of automatic identification and security issues.

The conference was inaugurated by **Prof. G.B. Dhanokar**, Director MSBTE. He talked about different applications of IT in various sections, right from attendance to result processing in MSBTE.

The guest of honour, **Mr. T. Vasu**, Director Tandon group of companies, in the opening address, said that the everyday talks of global recession, falling stock markets; its impact on IT and Telecom sector should not deter the society; instead, the young minds should try to become entrepreneurs and manufacture devices / equipments. He also deliberated upon the various applications of RF ranging from telecom industry to transportation, medical and even power generation where the technology could be used to avoid wastage of power.

Mrs. A.S. Diwakar, Joint secretary of the conference proposed vote of thanks for the inaugural session..

Dr. V.V. Bedekar, Chairman, Vidya Prasarak Mandal, Thane. explained that organizing seminars exposes students in getting inputs beyond classroom teaching. He echoed the thoughts of Mr. T Vasu asking students to become entrepreneurs. He opined that mindset needs to be changed to enjoy the true benefits of technology.

Mr. Harish Aiyer, Director, SOFTCeLL technologies Ltd., in his keynote address on “Biometrics” explained the difference between identification and verification, jointly called as authentication. Also, he cautioned that there is no recourse for revoking a compromised identifier.

Mr. M. Anand, General Manager, Godrej and Boyce Ltd., Electronics Security Solutions, delivered a talk on “Industry Perspective of Biometrics”. He said that it is a good idea to use 2-3 levels of biometric solutions rather than relying on one technique. He also showed the comparison of various biometric techniques on the basis of genotypic, randotypic behavioral characteristics with relevant video visuals.

Being the leaders in security systems, he pointed out the fine nuances of developing such products.

The demonstration by **Mr. Rohit Nalwade**, CEO, Consumer Vision on “Assisted RFID tag”; his innovation, was an indicator of the extent to which this technology can provide opportunities. Justifying his product, he reiterated that while distance was the limitation of passive tag, maintenance; mainly battery life was a constraint of active tag. He also touched upon applications of Near Field communication (NFC).

A very interesting and useful paper written by Mr. N. S. Barse, librarian and presented by **Dr. Savanur, senior faculty**, KG Joshi college of Arts and Commerce on “Application of RFID in library science”. His presentation gave the relevance of technology in stocking, identifying and organizing books in the library. It is also possible to locate a book of your interest with the RF tracker. Hopefully the treasure of knowledge can now be preserved without worrying about the theft.

Mr. Vinayak Bharadi, lecturer, Department of E & TC, Thadomal Shahani engineering college presented a paper on “Specialized global features for offline signature recognition”. Signature recognition is a must for document authentication, especially in banking sector. The basis for signature recognition is that no two people sign in the same manner. He demonstrated the pre-processing steps for signature extraction like noise removal, intensity normalization, scaling, thinning etc.

He explained various local features of signature like pressure points, velocity, acceleration, slope and global features like number of pixels, height, width, angle of signature, surface area which are used for extrapolating the data.

Mrs. Kirti Agashe, Head, Industrial Electronics dept. VPM’s Polytechnic, presented a paper on “Automatic Identification Techniques, Frequency Ranges and Radio Licensing Regulations” explaining the basics of various auto-identification techniques like bar codes, OCR, voice recognition, smart cards, finger printing procedures, their applications, advantages and limitations.

Comparison of different RFID procedures shown by her would enable one to choose the right technique for their applications. Further, different frequency ranges along with their specific application areas were covered by her.

Mr. Rahul Kulkarni, Senior Manager, Siemens, has also contributed for creation of the paper.

Mrs. Anita Diwakar, lecturer Computer engineering dept., VPM’s Polytechnic, presented the paper titled “RFID, its Applications and Integration of RFID and WSN”. She elaborated the various classes of tags, the basic block diagram of RFID reader and criteria for readers. The technological advancements have enabled the development of wireless sensor network (WSN). Smart sensors used in this are used to create a smart environment. She also suggested that RFID could be integrated with WSN for better results. The technology has a very important role in food chain management and logistics.

Mrs. Anuradha Kamble, lecturer E&TC, SIES institute of Technology, Navi Mumbai also contributed for the creation of the paper.

Mrs. Usha Raghavan, Head, Information technology dept. VPM's Polytechnic, presented a paper on "Biometrics". She rightly pointed out the need for the implementation of Biometric technology at educational institute level. She explained the advantages and applications of Biometrics, its components and how it works. She stressed for multi-level authentication for any biometric system.

In the valedictory address, **Mr. N.K. Marwah**, MD, Magna services Pvt. Ltd advised delegates to adapt to the changing technology and invest their thoughts into entrepreneurial actions. He advocated the challenges the technology will pose with the advancements in medical and biological fields of cloning and stem cell growth.

Mrs. V. A. Joshi, Head, Instrumentation engineering dept. VPM's Polytechnic, summarized the proceedings of the day and appealed to all the delegates to judiciously use the information and translate it into action for the benefit of society at large.

To conclude, **Mrs. S.K. Shukla**, Head, computer engineering dept. VPM's Polytechnic and organizing secretary of the conference proposed the vote of thanks.