

Science & Technology EXPO-2010: National Exhibition & Business Summit

CSI Udaipur Chapter, Special Interest Group Wireless Networks (SIG-WNs) and CSI student branch Techno India NJR Institute participated in a high profile National Exhibition & Business Summit, Science & Technology EXPO-2010, 3rd Destination, Rajasthan 2010, organized at the Udaipur during 14-16 December, 2010.



(L to R) Dr. Rajveer Singh Shekhawat, Chairman Udaipur Chapter, Dr. Dharm Singh, Honorary Secretary, Mr. Azimuddin Khan, Vice-Chairman, Udaipur

Inaugural Session

Sh. Mahendrajeet Singh Malviya Minister of Technical, Public Grievance & Engineering Education and Tribal Area Development Rajasthan Government inaugurated the Exhibition on January 14 December 2010 in the presence of Guest of Honours Sh. Mangi Lal Garasiya, Rajasthan Legislative Assembly and Dr. S.S. Chahal Hon'ble Vice Chancellor, Maharana Pratap University of Agriculture and Technology, Udaipur, Sh. Raghuvveer Singh Meena Lok Sabha Member, Sh. L.N. Pandya, Patron, Prof. B.P. Sharma, Pacific University, Tirlok Purbia, MLA, Udaipur.

An array of well-organized stalls put up by various government departments, Computer Society of India (CSI) and academic institutions, which included Indian Space Research Organization (ISRO) Bangalore, Defence Research & Development Organization (DRDO), Rajasthan Renewable Energy Corporation Jaipur, Department of Scientific & Industrial Research (DSIR), Technopreneur Promotion Programme (TePP) Outreach centre (TUC) College of Technology and Engineering (CTAE) Udaipur, National Research Development

Corporation (NRDC), Ministry of Earth Science, SIG-WNs CSI, CSI Udaipur Chapter and CTAE, CSI student branch Techno India NJR and others.



Inaugural Session: (L to R) Prof. B.P. Sharma, Tirlok Purbia, Raghuveer Singh Meena , Sh. Mahendrajeet Singh Malviya, Sh. Mangi Lal Garasiya, Dr. S.S. Chahal, Sh. L.N. Pandya

Dr. S.K. Jain, Joint Director, Defense Laboratory, Jodhpur, A.K. Badola, Additional Director, Directorate of Public Interface, DRDO, Shri S Satish, Director, Publications & Public Relations (ISRO), Rajendra Gondane, Scientific Officer NRDC and Dr. Dharm Singh, Honorary Secretary Udaipur Chapter participated in the exhibition.



Dr. Dharm Singh demonstrated wireless robotics system to Sh. Raghuveer Singh Meena and Dr. S.S. Chahal, Hon'ble Vice-Chancellor MPUAT, Udaipur and visitors

Networked Mobile Wireless Robotics for Agriculture

The ever-increasing popularity of IP networks, transmitting video, voice, and data simultaneously over Ethernet/Internet is becoming a standard feature at locations the world over. Travelling to offsite locations, such as remote equipment depots, requires time and money. Remote video streaming provides instant access into offsite locations anytime, anywhere by accessing a standard Web browser. Multiple users, regardless of where they are located, can access the video streams simultaneously and discuss the video in real-time. With remote video streaming, stakeholders can visually look at rural agriculture and instantly see for themselves the situation. This results in more informed decisions and quicker problem resolution. Communication media between Networked Mobile Wireless Robotics for Agriculture in rural areas, the service enables clients and their customers to visually see into critical offsite operations without ever leaving their offices.



(L to R): Prof. SM Mathur, Mr. Hemant Gera (District Collector), Sh. L.N. Pandya (Patron) enquired about the wireless robotics system and IP Camera's

Dr. Dharm Singh demonstrated the audio and video navigation using robotics system through wireless network along with mobile phone and digital camera used for video capturing. The developed Robot can be controlled from any where in the world by making simply a call to specific number for full control of the Robot.



Shri S. Satish demonstrated ISRO's prototype component models

The robot is controlled by the use of a self designed controller board. The controller board is used to control the movement of the robot. Besides the movement control, the data is received from the robot by the use of a microcontroller which displays the sensor readings from digital camera. The remote navigation of the robot can be done through the use of PC. The images captured by the robot are sent on the PC through a serial port. The developed application software can be used for using to interface the microcontroller and the PC.

Shri S. Satish Director, Publications & Public Relations ISRO's demonstrated the prototype component models that were used in Chandrayaan-I to Sri Taralabalu pontiff Shivamurthy Shivacharya maha swamiji. Several models of the Chandrayaan-I were displayed, which will continue to be open to the public till 16 December 2010.

Low- Cost Rescue Robot for Disaster Management



CSI Udaipur Chapter OBs and Students Members of TINJR Institute Udaipur

The CSI students members of Techno India NJR Institute, Udaipur demonstrated a low-cost " Prototype Robot" for pro-disaster management which can overcome the budget-constraints as well as fully capable of rescue purposes for incident management. Disaster may strike any time, any place and can also end up in many casualties.

Disaster can be natural (floods, earthquake, storms etc) or man made (terrorist attack, sabotage, minefields blowing up, chemical or nuclear leaks etc.). The thing that baffles is that when a disaster strikes it seems that we are not prepared for it. The disaster struck places are often not easily accessible and hazardous even to the disaster relief forces. In the process of disaster response the response force personnel themselves are exposed to many dangers.



The CSI student's members of Techno India NJR Institute, Udaipur demonstrated Wireless Robotics models to the Guest and visitors

The exhibition was open to public and the venue was teeming with busloads of school children and students from educational institutions which will continue to be open to the public till 16 December 2010.

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Report prepared by Dr. Dharm Singh, Hon. Secretary CSI, Udaipur Chapter



Inaugural Session: (L to R) Dr. Dharm Singh, Dr. AK Jetawat, Er. RS Vyas, Prof. B.P. Bhatnagar, Prof. Karunesh Saxena, Prof. ML Kaka, Mr. Azimuddin Khan, Mr. Harish Rajani

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