April 2011

Editorial

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Recommended Citation

Patnaik, Srikanta (2011) "Editorial," *International Journal of Instrumentation Control and Automation*: Vol. 1 : Iss. 1 , Article 1.
Available at: https://www.interscience.in/ijica/vol1/iss1/1

EDITORIAL

Editor- in-Chief
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We are delighted to announce that first issue of International Journal of Instrumentation, Control & Automation (IJICA) has come out. The initial issue of IJICA has addressed diversified aspects related to Automation and instrumentation along with fundamental characteristics of the modern industry with an attempt to making it more efficient and qualitative among the academicians, professionals, researchers, developers, users, practitioner and students. Being one of the refereed journals in the field of Computer Engineering and Science the issues aims to come up in a big way and becoming the most sought-after research forum among the millennial and Gen Z learners. The vast framework of Instrumentation, Control & Automation is ranging from Process automation industry, Transducers & Sensors to Control Valves, Industrial Automation and Systems, Design & Engineering and Micro-controller professionals to learn application and requirement of Instrumentation & control engineering either at small or at large scale everywhere in the world. Hence IJICA covers issues necessary subject of interest and the practical applicability of Process automation industry, instrumentation and control engineering. The inaugural issue included 13 papers which are emphasize embedded technologies and their corresponding applications with basic understanding for principles of Measurement Control, Instrumentation & automation engineering.

The first paper entitled "An Energy Saving Multi-Directional Routing Protocol for Mobile Ad-hoc Networks" authored by Prasant Kumar Pattnaik and Rajib Mall propose a protocol named as Energy Saving Multi Directional Routing (ESMDR) that provides a lower energy cost effective routing solution.

The second paper entitled "Hot Strip Mill Transportation in Rourkela Steel Plant" by Rajat Kumar Panigrahy et al. covers the possible adaptation of electronic transport means in HotStrip Mill for improving finished product quality or present system operating in Rourkela steel plant.

The next paper by Shrabanee Swagatika and P.K. Pattnaik titled as "Design Criteria of SOA for Cloud Based Infrastructure Resource Management as a Service" which aim to propose a architecture by aggregate these two approaches for low cost and efficient access of infrastructures by compare the previous existing solution for resource management.

The fourth paper authored by S. K. Pani et al. entitled "Web Usage Mining: A Survey on Pattern Extraction from Web Logs" presents an overview of web usage mining and also provides a survey of the pattern extraction algorithms used for web usage mining.

The fifth paper entitled "Rourkela steel plant automation: A case study" authored by Rajat Kumar Panigrahy et al. discuss the automation process in Integrated material management system (IMMS), Electronic Procurement system (EPS), Product Planning and Control System (PPCS) are discussed and possibility of implementation of ERP and GPS based transportation system for automation.

The next paper authored by K. Nagarjuna Reddy et al. entitled "CMOS Logic Design with FINFETS using 32nm TECHNOLOGY" propose double gate transistor i.e. FINFETS circuits. It is the substitute of bulk CMOS and to check the other submicron technology compared to that this submicron technology got less power consumption.

The seventh paper entitled "A Review of Trends in Research on Web Mining" by Manoj Pandia, Subhendu Kumar Pani and Sanjay Kumar Padhi, reviews the research and application issues in web mining besides proving an overall view of Web mining.

The eighth paper entitled "A Novel Power Efficient Routing Scheme for Wireless Sensor Networks" is authored by Koushik Majumder and Sudhabindu Ray propose a new power-aware, adaptive, hierarchical and chain based protocol - CCPAR that utilizes the periodic assignments of the cluster head role to different nodes based on the highest residual battery capacity for ensuring the even dissipation of power by all the nodes.

Next, V. Hima Sankar et al. in their paper entitled "Minimal Energy Efficient Routing (MEER) Protocol using GSP For Sensor Network" have compared their work of energy saving scheme, named as minimal energy efficient routing (MEER) Protocol, which uses GSP (Gossip based sleep Protocol) to achieve energy efficiency in sensor networks with the existing work given by GSP.

The tenth paper by Sunil Pratap Singh et al. with the title "A Web-Based Tourist Decision Support System for Agra City" a Web-Based Tourist Decision Support System (WTDSS) for Agra City has been developed that allows the traveling community to find their route in city and ask for information about sights, accommodations and other places of interest which are nearby to him to improve the convenience, safety and efficiency of travel.

The next paper authored by Debashreet Das entitled "RFID Deployment in INDIAN RAILWAYS: A case study of E-Transport Initiative in India" has scrutinize the loopholes thatexist in the system and examines the modus operandi of RFID technology to address existing opportunities and business applications responsive to today's global needs.

Next, authors Sanjay Kumar Mohanty and Prasant Kumar Pattnaik presents study for identification and here used a fusion mechanism that amalgamates both, a Canny Edge detection and a Circular Hough Transform to detect the iris boundaries in the eye's digital image in their paper titled "Authentication Based on Texture Analysis And SVM Classification"

The very last paper of this issue entitled "Packet Striping for Multi-Interface"s authored by Saima Begum and P.K. Pattnaik represent a detail discussion on architectural requirements and algorithms that are needed to support a system based on Mobile IPv6 with presenting an extensive scheme to support even if the correspondent node also has multiple interfaces.

We hope the reader shall get immense benefit out of the research publication and extending invitation the authors to contribute more articles in the future issues of IJICA.

Editor-in-Chief
Prof. (Dr.) Srikanta Patnaik