2014 International Conference
on
Application and Innovation in Mobile Computing
AIMoC 2014

Table of Contents

Preface.......................................................................................................................................................vii
Committee Lists.......................................................................................................................................viii
Program Committee....................................................................................................................................x

Mobile Grid, Cloud, Opportunistic Networks

Negotiation Based Service Brokering Using Game Theory .................................................................1

  Benay Ray; SunirmalKhatua; Sarbani Roy

Delay-Overhead Trade-Offs in Mobile Opportunistic Network using ......................................................9
TTL based Restricted Flooding

  Suvadip Batabyal; Parama Bhaumik

ANGELS: A Framework for Mobile Grids .............................................................................................15

  Pubali Datta; Swarnava Dey; Himadri Sekhar Paul; Arijit Mukherjee

Resource Allocation in Cloud using Simulated Annealing.................................................................21

  Diptangshu Pandit; Samiran Chattopadhyay;
  Matangini Chattopadhyay; NabenduChaki

Mobile Cloud Computing Based Energy Efficient Offloading
Strategies for Femtocell Network.................................................................................................28

  Anwesha Mukherjee; Payel Gupta; Debashis De
Wireless Ad-hoc Networks and Applications

A Case Study on smart Surveillance Application System using.................................................................36
WSN and IP webcam

Sayantani Saha; Sarmistha Neogy

Network-Coded Broadcast Incremental Power Algorithm for.................................................................42

Sauradyuti Coondu; Anasua Mitra; Samiran Chattopahyay;
Matangini Chattopadhyay; Munmun Bhattacharya

Application of Mobile agent in VANET for Measuring.................................................................48
Environmental Data

Gaurav Mitra; Sarmistha Neogy; Chandreyee Chowdhury

Development of a Smartphone Application for Bedside.................................................................54

Sarthak Ghosh; Monojit Das; Anindya Ghosh

Verification of i* Models for Existential Compliance Rules in.................................................................60
Remote Healthcare Systems

Novarun Deb; Nabendu Chaki

A Secure Symmetric Image Encryption Based on Linear Geometry.................................................................67

Prabir Naskar; Ayan Chaudhuri; Atal Chaudhuri

Wireless Protocols

Performance Analysis of SINEMO and NEMO BSP for.................................................................75
Vehicle-Infrastructure-Vehicle Communications

Palash Kundu; Shankar Kumar Ghosh; Bhaskar Sardar

Remote Monitoring of Power Frequency Electrical Signals.................................................................81
Employing GSM Network network

Riddhi Ghosh; Biswendu Chatterjee; Debangshu Dey;
Sovan Dalai; Sivaji Chakravorti

Performance Evaluation of a LBS System Delivering Location-Based.................................................................85
Services Using Wireless Local Area Networ
Pampa Sadhukhan; Shibani Das
Performance Analysis of CSMA/CA Protocol during White Space.........................................................91
Identification in Cognitive Radio Networks
  Subhasree Bhattacharjee; Swarup Mandal; Bhaskar Sardar

A Fine-tuned Packet Scheduling for WiFi-based Long Distance Networks..................................................97
  Iftekhar Hussain; Nurzaman Ahmed; Dilip Saikia; Nityananda Sarma

Wireless Sensor Networks

A Distributed Greedy Algorithm for Construction of Minimum..................................................................104
Connected Dominating Set in Wireless Sensor Network
  Jasaswi Prasad Mohanty; Chittaranjan Mandal

Integer linear programming formulation of optimal beacon placement problem in WSN
  Sarbani Roy; Nandini Mukherjee

Energy Efficient Coverage of Static Sensor Nodes Deciding on..................................................................111
Mobile Sink Movements using Game Theory
  Nimisha Ghosh; Indrajit Banerjee; Tuhina Samanta

Coverage Constrained Non-Uniform Node Deployment in........................................................................126
Wireless Sensor Networks for Load Balancing
  Punyasha Chatterjee; Nabaniita Das

Detection of Node Failure in Wireless Sensor Networks.............................................................................133
  Zeenat Rehena; Rajesh Mukherjee; Sarbani Roy; Nandini Mukherjee

Energy Aware Fault Tolerant Framework in Wireless Sensor Network......................................................139
  Siba Mitra; Ajanta De Sarkar

A Reliable Two-Tier Energy-Efficient Topology Building.............................................................................146
Algorithm for Wireless Sensor Networks
  Chiranjib Patra; Parama Bhaumik; Matangini Chattopadhyay; Munmun Bhattacharya; Saswati Mukherjee
Security in Wireless and Mobile Networks

An Observer-based Distributed Scheme for Selfish Node Detection in a Post-disaster Communication Environment using Delay Tolerant Network

Chandrima Chakrabarti; Ananya Banerjee; Siuli Roy

Trust Based Energy Efficient Detection and Avoidance of Black Hole Attack to Ensure Secure Routing in MANET

Suparna Biswas; Sarmistha Neogy; Tanumoy Nag

Resilience Design using the Challenge Countermeasure Tree (CCT) Model

Somia Natouri; Chidung Lac; Ahmed Serhrouchni

AESCRT: Agent enabled secure CRT based routing topology for MANET

Ditipriya Sinha; Rituparna Chaki

A Global Reputation Estimation and Analysis Technique for Detection of Malicious Nodes in a Post-Disaster Communication Environment

Souvik Basu; Siuli Roy

State of the Art Analysis of Network Traffic Anomaly Detection

Debdutta Barman Roy; Rituparna Chaki

Performance analyses of VoIP spoofing attacks using classification algorithm

Ganesan Vennila; Supriya Shalini N