

Engineering Cyber-Physical Systems  
and Critical Infrastructures 3

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Joy long-Zong Chen *Editors*

# Intelligent Cyber Physical Systems and Internet of Things

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# Contents

<b>Term Frequency Tokenization for Fake News Detection</b> .....	1
Pallavi Suresh, Abhishek Shettigar, M. Karunavathi, Ajith, and M. G. Ramanath Kini	
<b>Aquaculture Monitoring System Using Internet of Things</b> .....	11
G. V. R. Kameshwar Rao, T. J. Dhivya Shrilaa, I. Akash, and G. Gugapriya	
<b>A Comprehensive Study and Implementation of Memory Malware Analysis with Its Application for the Case Study of CRIDEX</b> .....	31
Digvijay Singh and Rajesh Yadav	
<b>IoT Based Anti Poaching of Trees and Protection of Forest</b> .....	45
E. V. Kameswararao, M. Jaya Shankar, T. V. Sai Lokesh, and E. Terence	
<b>Artificial Intelligence Based Efficient Activity Recognition with Real Time Implementation for ATM Security</b> .....	57
S. Srinivasan, AL. Vallikannu, Adapa Sankar Ganesh, Iragamreddy Raj Kumar, and Beerreddy Venu Gopal	
<b>Terror Attack Classification with the Application of Orange Data Mining Tool and Neo4j Sandbox</b> .....	69
Ankit Raj, Suchitra A. Khoje, and Sagar Bhilaji Shinde	
<b>Multipurpose IoT Based Camera Using Deep Learning</b> .....	85
Urvashi Dube, Sudhish Subramaniam, and G. Sumathi	
<b>Dr. Watson AI Based Healthcare Technology Project</b> .....	101
N. Suresh Kumar, S. Ganesh Karthick, K. P. Aswin Kumar, S. Balaji, and T. Nandha Sastha	
<b>Empirical and Statistical Comparison of RSA and El-Gamal in Terms of Time Complexity</b> .....	111
Ankita Kumari, Prashant Pranav, Sandip Dutta, and Soubhik Chakraborty	



<b>IoT Communication to Capture and Store Data to Thingspeak Cloud Using NodeMCU and Ultrasonic Sensor</b> .....	121
Priya J. Payyappilly and Shweta Dour	
<b>A Comprehensive Study on Cloud Computing: Architecture, Load Balancing, Task Scheduling and Meta-Heuristic Optimization</b> .....	137
Shruti Tiwari and Chinmay Bhatt	
<b>Balancing Exploration and Exploitation in Nature Inspired Computing Algorithm</b> .....	163
K. Praveen Kumar, Sangeetha Singarapu, Mounika Singarapu, and Swaroop Rakesh Karra	
<b>Blockchain Based Secure, Efficient, and Scalable Platform for the Organ Donation Process of Healthcare Industry</b> .....	173
Keyur Parmar, Vadlapudi Devanand Kumar, Neduri Leela Prasanth, Pranoppal, Kasa Charan Teja, Shriniwas Patil, and Kaushal A. Shah	
<b>Image Enhancement in Frequency Domain Fingerprint Detection and Matching Approach</b> .....	185
Suhasini S. Goilkar and Shashikant S. Goilkar	
<b>Developing Machine Learning Based Mobile App for Agriculture Application</b> .....	195
R. Dhivya and N. Shanmugapriya	
<b>Attack Detection in IoT Using Machine Learning—A Survey</b> .....	211
Saeed Ali Haifa Ali and J. Vakula Rani	
<b>An Extensive Study on Logic Emerging IoT Adiabatic Techniques for Low-Power Circuit</b> .....	229
T. Vijayalakshmi and J. Selvakumar	
<b>A Critical Review of Agri-Food Supply Management with Traceability and Transparency Using Blockchain Technology</b> .....	239
Sanket Araballi and P. Devaki	
<b>Face-Anti-spoofing Based on Liveness Detection</b> .....	251
Shivani Mangal and Khushboo Agarwal	
<b>PDR Analysis and Network Optimization of Routing Protocols for Edge Networks</b> .....	265
Archana Ratnaparkhi, Radhika Purandare, Gauri Ghule, Shraddha Habbu, Arti Bang, and Pallavi Deshpande	
<b>Privacy Threat Reduction Using Modified Multi-line Code Generation Algorithm (MMLCGA) for Cancelable Biometric Technique (CBT)</b> .....	275
Pramod D. Ganjewar, Sanjeev J. Wagh, and Aarti L. Gilbile	

<b>Systematic Literature Review—IoT-Based Supply Chain Management in Industry 4.0</b> .....	291
Sreeparnesh Sharma Sivadevuni and Sathish Kumar Ravichandran	
<b>A Review on Urban Flood Management Techniques for the Smart City and Future Research</b> .....	303
Anil Mahadeo Hingmire and Pawan R. Bhaladhare	
<b>Application of Distributed Constraint Optimization Technique for Privacy Preservation in Cyber-Physical Systems</b> .....	319
Manas Kumar Yogi and A. S. N. Chakravarthy	
<b>Grip Assisting Glove for Charcot-Marie-Tooth Patients</b> .....	329
Varun Sarathchandran, Jason Vincent, Juel Mathais George, Polu Sathwik Reddy, and R. Ambika	
<b>Accident Detection in Surveillance Camera</b> .....	345
A. P. Adil, M. G. Anandhu, Jeovan Elsa Joy, Twinkle S. Karethara, S. Anjali, and B. R. Poorna	
<b>Wheeled Robots for Isolation Wards</b> .....	355
U. Sahana and N. Rajesh	
<b>A Survey on Various Crypto-steganography Techniques for Real-Time Images</b> .....	365
R. Tanya Bindu and T. Kavitha	
<b>A Lightweight Image Cryptosystem for Multimedia Internet of Things</b> .....	375
V. Panchami, Arjun Rajasekharan, and Mahima Mary Mathews	
<b>A Study on Parking Space Allocation and Road Edge Detection for Optimizing Road Traffic</b> .....	393
H. Varun Chand, Seema Sabharwal, Anil Carie, and S. Arun Kumar	
<b>Human Physical Activities Based Calorie Burn Calculator Using LSTM</b> .....	405
Jadhav Kalpesh, Jadhav Rushikesh, Kalbande Swaraj, Katta Rohan, and Rakhi Bharadwaj	
<b>Alternate Tiny Encryption Algorithm: A Modified Tiny Encryption Algorithm for Improved Data Security</b> .....	425
Mehak Gupta, Nimit Agrawal, and Manas Ranjan Prusty	
<b>Crystal Clear Analysis of Open-Source Automation Platforms</b> .....	437
Kiran Jadhav, Mangesh Nikose, and Sagar Shinde	
<b>A Review Paper on Network Intrusion Detection System</b> .....	453
Nongmeikapam Thoiba Singh and Raman Chadha	



<b>ESP32 Based Irrigation System</b> .....	465
M. Koteswara Rao, M. Satish Kumar, M. Jaijaivenkataramana, and Ch. Sai Sowjanya	
<b>RFID (Radio Frequency Identification) Tag Collision Risk Mitigation Analysis and Avoidance</b> .....	475
Aditya Sukhwal, Gourab Kundu, and Chandrani Chakravorty	
<b>BizGuru 1.0: Design and Development of a Mobile-Based Digital Marketing Guide for Elderly</b> .....	487
Ahmad Sofian Shminan, Nur Zulaikha Mohamed Aziyen, Lee Jun Choi, and Merikan Aren	
<b>Development of Secure Cloud-Based Healthcare Management Using Optimized Elliptic Galois Cryptography</b> .....	505
V. Gokula Krishnan, D. Siva, S. MuthuSelvi, T. A. Mohana Prakash, P. A. Abdul Saleem, and S. Mary Rexcy Asha	
<b>A Review of Mobile Computation Offloading Techniques</b> .....	519
M. Jyothirmmai, Kesavan Gopal, and M. Sailaja	
<b>Study of the Impact of Sybil Attack in VANETs Using F2MD</b> .....	533
T. Pavithra, B. S. Nagabhushana, and Suchismitha Das	
<b>Aatmanirbhar Sanchar: Self-Sufficient Communications</b> .....	545
Jay Jhaveri, Abhay Gupta, Prem Chhabria, Neeraj Ochani, Sharmila Sengupta, Mrs. Sunita Suralkar, and Shashi Dugad	
<b>A Meta Heuristics SMO-SA Hybrid Approach for Resource Provisioning in Cloud Computing Framework</b> .....	563
Archana and Narander Kumar	
<b>A Comprehensive Study of Automation Using a WebApp Tool for Robot Framework</b> .....	577
N. Alok Chakravarthy and Usha Padma	
<b>Detection of Mirai and GAF-GYT Attack in Wireless Sensor Network</b> .....	587
Hanjabam Saratchandra Sharma, Moirangthem Marjit Singh, and Arindam Sarkar	
<b>A Brief Review of Network Forensics Process Models and a Proposed Systematic Model for Investigation</b> .....	599
Merly Thomas and Bandu Meshram	
<b>IOT Based Solution for Effective Social Distancing and Contact Tracing for COVID-19 Prevention</b> .....	629
S. Kanakaprabha, P. Arulprakash, V. Priyanka, Vineetha Varghese, and A. Sureshkumar	

<b>Design and Implementation of Highly Secured Nano AES Cryptographic Algorithm for Internet of Things</b> .....	645
E. Roopa and Yasha Jyothi M. Shirur	
<b>Convergence of Communication Technologies with Internet of Things</b> .....	659
V. Dankan Gowda, Suma Sira Jacob, Naziya Hussain, R. Chennappan, and D. T. Sakhare	
<b>Chatbots: A Survey of the Technology</b> .....	671
Hrithika Singh, Asmita Bhangare, Rashmi Singh, Shubhangi Zope, and Pallavi Saindane	
<b>An Improved Machine Learning Algorithm for Crash Severity and Fatality Insight in VANET Network</b> .....	693
S. Bharathi and P. Durgadevi	
<b>Network Monitoring of Cyber Physical System</b> .....	705
Mayank Srivastava, Aman Maurya, Utkarsh Sharma, and Shikha Srivastava	
<b>Impact of Security Attacks on Congestion in Wireless Sensor Networks</b> .....	721
Divya Pandey and Vandana Kushwaha	
<b>IoT Weather Forecasting Using Ridge Regression Model</b> .....	733
Karthik G. Dath, K. E. Krishnaprasad, T. S. Pushpa, and K. P. Shailaja	
<b>Automated Cloud Monitoring Solution: Review</b> .....	747
Ishwari Deshmukh and Jayshri D. Pagare	
<b>A Secured Framework Against DDoS Attack in Wireless Networks</b> ....	757
O. K. Vismaya, Ajay Kumar, Arya Paul, and Albins Paul	
<b>Anomaly Based Intrusion Detection System Using Rule Based Genetic Algorithm</b> .....	769
Shraddha R. Khonde	
<b>Hybrid Learning Approach for E-mail Spam Detection and Classification</b> .....	781
Rimitha Shajahan and P. L. Lekshmy	
<b>Smart Solid Waste Management System Using IoT Technology: Comparative Analysis, Gaps, and Challenges</b> .....	795
Meenakshi Shruti Pal and Munish Bhatia	
<b>HLWEA-IOT: Hybrid Lightweight Encryption Algorithm Based Secure Data Transmission in IoT-MQTT Networks</b> .....	813
S. Hariprasad, T. Deepa, and N. Bharathiraja	



<b>A Practical Approach for Crop Insect Classification and Detection Using Machine Learning</b> .....	825
Ravindra Yadav and Anita Seth	
<b>Attendance Portal Using Face and Speaker Recognition</b> .....	845
Sahil Sharma, Shivam Prajapati, Merin Meleet, and B. S. Rekha	
<b>Blockchain-Enabled Network for 6G Wireless Communication Systems</b> .....	857
Nazanin Moosavi and Hamed Taherdoost	
<b>Machine Learning Based Automated Disaster Message Classification System Using Linear SVC Algorithm</b> .....	869
N. Merrin Prasanna, S. Raja Mohan, K. Vishnu Vardhan Reddy, B. Sai Kumar, C. Guru Babu, and P. Priya	
<b>Intelligent Healthcare System</b> .....	881
M. Senthamil Selvi, K. Abinaya, N. Jemy Sharon, and R. Lakshmi Pooja	
<b>Intelligent Predictive Maintenance for Industrial Internet of Things (IIoT) Using Machine Learning Approach</b> .....	897
Umesh W. Hore and D. G. Wakde	



# Convergence of Communication Technologies with Internet of Things



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and D. T. Sakhare

**Abstract** Internet of Things (IoT) is the term used to describe a network of physical things such as mobile devices and household appliances that are embedded with electronics, software, sensors, and network connection that enables these objects to gather and exchange data. Sensors, recognition and remote control of items are all made possible by the Internet of Things (IoT). Once this property is combined with sensors and actuators, it becomes an example of a cyber-physical system, which includes technologies like intelligent power grids (grids), intelligent homes (smart homes), smart cities (smart cities), and intelligent transportation systems (ITS). Integrating MANET and WSN with IoT is covered in this study. Technology and protocols needed to deploy the Internet of Things (IoT) are explored in this article.

**Keywords** Internet of things · Wireless sensor network · Protocol · Network · Sensor · Node

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