

Advances in Intelligent Systems and Computing

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Preface

This book is a collection of high-quality peer-reviewed research papers presented at the 6th International Conference on Frontiers of Intelligent Computing: Theory and Applications (FICTA-2017) held at School of Computer Applications, KIIT University, Bhubaneswar, Odisha, India, during October 14–15, 2017.

The idea of this conference series was conceived by few eminent professors and researchers from premier institutions of India. The first three editions of this conference: FICTA-2012, FICTA-2013, and FICTA-2014 were organized by Bhubaneswar Engineering College (BEC), Bhubaneswar, Odisha, India. Due to its popularity and wide visibilities in the entire country as well as abroad, the fourth edition FICTA-2015 has been organized by the prestigious NIT Durgapur, WB, India. The fifth edition FICTA-2016 was organized by KIIT University, Bhubaneswar, Odisha, India. All papers of past FICTA editions are published by Springer AISC series. Presently, FICTA-2017 is the sixth edition of this conference series which aims to bring together researchers, scientists, engineers, and practitioners to exchange and share their theories, methodologies, new ideas, experiences, applications in all areas of intelligent computing theories, and applications to various engineering disciplines like Computer Science, Electronics, Electrical, Mechanical, Biomedical Engineering.

FICTA-2017 had received a good number of submissions from the different areas relating to decision sciences, intelligent computing, and its applications. These papers have undergone a rigorous peer review process with the help of our program committee members and external reviewers (from the country as well as abroad). The review process has been very crucial with minimum 2 reviews each and in many cases 3–5 reviews along with due checks on similarity and content overlap as well. FICTA-2017 witnessed more than 300 papers including the main track as well as special sessions. The conference featured seven special sessions in various cutting-edge technologies of specialized focus which were organized and chaired by eminent professors. The total toll of papers received, included submissions received cross country along with 7 overseas countries. Out of this pool, only 131 papers were given acceptance and segregated as two different volumes for

publication under the proceedings. This volume consists of 59 papers from diverse areas of information and decision sciences.

The conference featured many distinguished keynote addresses by eminent speakers like Dr. Siba K. Udgata (University of Hyderabad, Telangana, India) on Intelligent and Soft Sensor for Environment Monitoring; Dr. Goutam Sanyal (NIT Durgapur, WB, India) on Vision-based Biometric Features; Dr. Kamiya Khatter (Sr. Editorial Assistant, Springer Nature, India) on Author Services and Tools. These keynote lectures embraced a huge toll of an audience of students, faculties, budding researchers, as well as delegates.

We thank the General Chairs: Prof. Samaresh Mishra, Prof. Veena Goswami, KIIT University, Bhubaneswar, India, and Prof. Suresh Chandra Satapathy, PVPSIT, Vijayawada, India, for providing valuable guidelines and inspiration to overcome various difficulties in the process of organizing this conference.

We extend our heartfelt thanks to the Honorary Chairs of this conference: Dr. B. K. Panigrahi, IIT Delhi, and Dr. Swagatam Das, ISI, Kolkata, for being with us from the beginning to the end of this conference and without their support this conference could never have been successful.

We would also like to thank School of Computer Applications and Computer Engineering, KIIT University, Bhubaneswar, who jointly came forward to support us to organize sixth edition of this conference series. We are amazed to note the enthusiasm of all faculty, staff, and students of KIIT to organize the conference in such a professional way. Involvements of faculty coordinators and student volunteer are praiseworthy in every respect. We are confident that in the future too we would like to organize many more international-level conferences in this beautiful campus. We would also like to thank our sponsors for providing all the support and financial assistance.

We take this opportunity to thank authors of all submitted papers for their hard work, adherence to the deadlines, and patience with the review process. The quality of a refereed volume depends mainly on the expertise and dedication of the reviewers. We are indebted to the program committee members and external reviewers who not only produced excellent reviews but also did these in short time frames. We would also like to thank the participants of this conference, who have participated in the conference above all hardships. Finally, we would like to thank all the volunteers who spent tireless efforts in meeting the deadlines and arranging every detail to make sure that the conference can run smoothly. All the efforts are worth and would please us all, if the readers of this proceedings and participants of this conference found the papers and conference inspiring and enjoyable. Our sincere thanks to all press print and electronic media for their excellent coverage of this conference.

We take this opportunity to thank all Keynote Speakers, Track and Special Session Chairs for their excellent support to make FICTA-2017 a grand success.

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Contents

A New Approach for Authorship Attribution	1
P. Buddha Reddy, T. Raghunadha Reddy, M. Gopi Chand and A. Venkannababu	
Using Aadhaar for Continuous Test-Taker Presence Verification in Online Exams	11
N. Sethu Subramanian, Sankaran Narayanan, M. D. Soumya, Nitheeswar Jayakumar and Kamal Bijlani	
Determining the Popularity of Political Parties Using Twitter Sentiment Analysis	21
Sujeet Sharma and Nisha P. Shetty	
Analysis of Passenger Flow Prediction of Transit Buses Along a Route Based on Time Series	31
Reshma Gummadi and Sreenivasa Reddy Edara	
Smart Fire Safety: Serious Game for Fire Safety Awareness	39
George Jacob, R. Jayakrishnan and Kamal Bijlani	
An OpenMP-Based Algorithmic Optimization for Congestion Control of Network Traffic	49
Monika Jain, Rahul Saxena, Vipul Agarwal and Alok Srivastava	
Comparative Analysis of Frequent Pattern Mining for Large Data Using FP-Tree and CP-Tree Methods	59
V. Annapoorna, M. Rama Krishna Murty, J. S. V. S. Hari Priyanka and Suresh Chittineni	
Wireless Seatbelt Latch Status Indicator	69
S. P. Adithya and O. V. Gnana Swathika	
A Study of Various Varieties of Distributed Data Mining Architectures	77
Sukriti Paul, Nisha P. Shetty and Balachandra	

Graph Representation of Multiple Misconceptions	89
Sylvia Encheva	
Classification Through Discriminant Analysis Over Educational Dataset	99
Parag Bhalchandra, Aniket Muley, Mahesh Joshi, Santosh Khamitkar, Hanumant Fadewar and Pawan Wasnik	
Dynamic and Secure Authentication Using IKC for Distributed Cloud Environment	107
M. Ranjeeth Kumar, N. Srinivasu and Lokanatha C. Reddy	
Planned Random Algorithm	119
Anurag Pant, Kunwar Agrawal and B. K. Tripathy	
Hurst Exponent as a New Ingredient to Parametric Feature Set for Mental Task Classification	129
Akshansh Gupta, Dharendra Kumar and Anirban Chakraborti	
A Crawler–Parser-Based Approach to Newspaper Scraping and Reverse Searching of Desired Articles	139
Ankit Aich, Amit Dutta and Aruna Chakraborty	
Impact of Cloud Accountability on Clinical Architecture and Acceptance of Healthcare System	149
Biswajit Nayak, Sanjaya Kumar Padhi and Prasant Kumar Pattnaik	
A Stability Analysis of Inverted Pendulum System Using Fractional-Order MIT Rule of MARC Controller	159
Deep Mukherjee, Palash Kundu and Apurba Ghosh	
KMDT: A Hybrid Cluster Approach for Anomaly Detection Using Big Data	169
Santosh Thakur and Ramesh Dharavath	
Extraction and Sequencing of Keywords from Twitter	177
Harkirat Singh, Mukesh Kumar and Preeti Aggarwal	
A Modular Approach for Social Media Text Normalization	187
Palak Rehan, Mukesh Kumar and Sarbjeet Singh	
Author Verification Using Rich Set of Linguistic Features	197
A. Bhanu Prasad, S. Rajeswari, A. Venkannababu and T. Raghunadha Reddy	
Deterministic and Randomized Heuristic Algorithms for Uncapacitated Facility Location Problem	205
Soumen Atta, Priya Ranjan Sinha Mahapatra and Anirban Mukhopadhyay	

Group Search Optimization Technique for Multi-area Economic Dispatch 217
 Chitralkha Jena, Swati Smaranika Mishra and Bhagabat Panda

Adaptive Control of Aircraft Wing Oscillations with Stiffness and Damping Nonlinearities in Pitching Mode 227
 L. Prabhu and J. Srinivas

Application of Total Least Squares Version of ESPRIT Algorithm for Seismic Signal Processing 237
 G. Pradeep Kamal and S. Koteswara Rao

Metadata-Based Semantic Query in Multilingual Databases 249
 Ch. V. S. Satyamurthy, J. V. R. Murthy and M. Raghava

A Step Towards Internet Anonymity Minimization: Cybercrime Investigation Process Perspective 257
 Shweta Sankhwar, Dhirendra Pandey and R. A. Khan

Comparison of Different Fuzzy Clustering Algorithms: A Replicated Case Study 267
 Tusharika Singh and Anjana Gosain

Passive Object Tracking Using MGEKF Algorithm 277
 M. Kavitha Lakshmi, S. Koteswara Rao, K. Subrahmanyam and V. Gopi Tilak

Instantaneous Time Smoothing in GPS Receivers Using Kalman Filter 289
 R. Revathi, K. S. Ramesh, S. Koteswara Rao and K. Uday Kiran

Application of Least Squares Algorithm for Precise GPS Receiver Positioning 297
 R. Revathi, K. S. Ramesh, S. Koteswara Rao and K. Uday Kiran

Application of Parametric Methods for Earthquake Precursors Using GPS TEC 305
 R. Revathi, K. S. Ramesh, S. Koteswara Rao and K. Uday Kiran

A Fuzzy-Based Modified Gain Adaptive Scheme for Model Reference Adaptive Control 315
 A. K. Pal, Indrajit Naskar and Sampa Paul

Early System Test Effort Estimation Automation for Object-Oriented Systems 325
 Pulak Sahoo, J. R. Mohanty and Debabrata Sahoo

Identification of Coseismic Signatures by Comparing Welch and Burg Methods Using GPS TEC 335
 K. Uday Kiran, S. Koteswara Rao, K. S. Ramesh and R. Revathi

Energy-Efficient GPS Usage in Location-Based Applications	345
Joy Dutta, Pradip Pramanick and Sarbani Roy	
Group Recommender Systems-Evolutionary Approach Based on Consensus with Ties	355
Ritu Meena	
Cryptanalysis of Image Cryptosystem Using Synchronized 4D Lorenz Stenflo Hyperchaotic Systems	367
Musheer Ahmad, Aisha Aijaz, Subia Ansari, Mohammad Moazzam Siddiqui and Sarfaraz Masood	
Automatic Text-Line Level Handwritten <i>Indic</i> Script Recognition: A Two-Stage Framework	377
Pawan Kumar Singh, Anirban Mukhopadhyay, Ram Sarkar and Mita Nasipuri	
Weight-Based Secure Approach for Identifying Selfishness Behavior of Node in MANET	387
Shoaib Khan, Ritu Prasad, Praneet Saurabh and Bhupendra Verma	
Assisting Vehicles Using Cyber-Physical Systems	399
Navid Anjum Munshi, Chandreyee Chowdhury and Sarmistha Neogy	
An Efficient Framework Based on Segmented Block Analysis for Human Activity Recognition	409
Vikas Tripathi, Durgaprasad Gangodkar, Monika Pandey and Vishal Sanserwal	
Ranked Gene Ontology Based Protein Function Prediction by Analysis of Protein-Protein Interactions	419
Kaustav Sengupta, Sovan Saha, Piyali Chatterjee, Mahantapas Kundu, Mita Nasipuri and Subhadip Basu	
Investigation of Optimal Cyclic Prefix Length for 4G Fading Channel	429
Ch. Vijay, G. Sasibhushana Rao and Vinodh Kumar Minchula	
High-Density Noise Removal Algorithm for Brain Image Analysis	437
Vimala Kumari G, Sasibhushana Rao G and Prabhakara Rao B	
A Pragmatic Study and Analysis of Load Balancing Techniques in Parallel Computing	447
Varsha Thakur and Sanjay Kumar	
A Novel Segmentation Algorithm for Feature Extraction of Brain MRI Tumor	455
Ch. Rajasekhara Rao, M. N. V. S. S. Kumar and G. Sasi Bhushana Rao	

Adaptive Parameter Estimation-Based Drug Delivery System for Blood Pressure Regulation 465
 Bharat Singh and Shabana Urooj

Mathematical Modeling of Sensitivity and Specificity for Basal Cell Carcinoma (BCC) Images 473
 Sudhakar Singh and Shabana Urooj

Integer Representation and B-Tree for Classification of Text Documents: An Integrated Approach 481
 S. N. Bharath Bhushan, Ajit Danti and Steven Lawrence Fernandes

Switching Angle and Power Loss Calculation for THD Minimization in CHB-Multilevel Inverter Using DEA 491
 Gayatri Mohapatra and Manas Ranjan Nayak

Load Balancing of Unbalanced Matrix with Summation Method 503
 Ranjan Kumar Mondal, Payel Ray, Enakshmi Nandi, Biswajit Biswas, Manas Kumar Sanyal and Debabrata Sarddar

Detection of Outliers Using Interquartile Range Technique from Intrusion Dataset 511
 H. P. Vinutha, B. Poornima and B. M. Sagar

A Novel Arbitrary-Oriented Multilingual Text Detection in Images/Video 519
 H. T. Basavaraju, V. N. Manjunath Aradhya and D. S. Guru

Working with Cassandra Database 531
 Saurabh Anand, Pallavi Singh and B. M. Sagar

Learning to Solve Sudoku Problems with Computer Vision Aided Approaches 539
 Tuan T. Nguyen, Sang T. T. Nguyen and Luu C. Nguyen

Combined Effect of Cohort Selection and Decision Level Fusion in a Face Biometric System 549
 Jogendra Garain, Ravi Kant Kumar, Dipak Kumar, Dakshina Ranjan Kisku and Goutam Sanyal

Global Stability of Harvested Prey–Predator Model with Infection in Predator Species 559
 Nishant Juneja and Kulbhushan Agnihotri

Flying Ad hoc Networks: A Comprehensive Survey 569
 Amartya Mukherjee, Vaibhav Keshary, Karan Pandya, Nilanjan Dey and Suresh Chandra Satapathy

Author Index 581

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