

FICTA
2018

**The 7th International Conference on
Frontiers of Intelligent Computing:
Theory and Applications**

29-30 November, 2018



DUY TAN UNIVERSITY

Address: No. 3 Quang Trung Str., Da Nang, Vietnam

Tentative Conference Program Schedule

DAY – I Thursday, 29 November 2018	
07:30 am to 08:30 am	Registration <i>No. 3 Quang Trung Str., Da Nang, Vietnam</i>
08:30 am to 09:30 am	Inaugural/Opening Session
09:30 am to 10:00 am	Keynote Lecture – I: Prof. Sheng Lung Peng National Dong Hwa University, Hualien, Taiwan
10:00 am to 10:30 am	Tea Break
10:30 am to 11:00 pm	Keynote Lecture – II: Dr. Anand Nayyar Duy Tan University, Da Nang, Vietnam
12:00 pm to 01:30 pm	Lunch Danang Petro Hotel 07 Quang Trung Str., Hai Chau Dis., Da Nang, Vietnam
01:30 pm to 03:30 pm	*Parallel Sessions 01 to 03
03:30 pm to 04:00 pm	Tea Break
04:00 pm to 05:30 pm	*Special Sessions
05:30 pm	Cultural Night and Gala Dinner Truc Lam Vien Restaurants & Coffee 08-10 Tran Quy Cap, Da Nang, Vietnam
DAY – II Friday, 30 November 2018	
07:30 am to 08:30 am	Registration
08:30 am to 09:30 am	*Parallel Sessions 04-05
09:30 am to 10:00 am	Tea Break
10:00 am to 12:00 pm	*Parallel Sessions 04-05
12:00 am to 01:00 pm	Best Paper Awards Felicitation of Chairs Photo Session
01:00 pm to 02:00 pm	Lunch & Closing Danang Petro Hotel 07 Quang Trung Str., Hai Chau Dis., Da Nang, Vietnam
DAY – III Saturday, 01 Dec 2018	
08:30 am	Da Nang City Tour for Delegates

FICTA 2018, Da-Nang Vietnam
List of Session Wise Papers for Oral Presentation

DAY – I
Thursday, 29 November 2018

**Session # 1 Trends in Cloud Computing,
IoT Technology, Signal and Image
Processing**

Timings: 1:30 pm to 03:30 pm

**Session Chairs: 1. Prof. Sheng Lung Peng;
2. Dr. Dac Nhuong Le**

Room No. : 702

Paper ID	Paper Title	Authors
4	Relabeling with Mask-S for Imbalanced Class Distribution	Bui Duong Hung, Dao Nam Anh and Dang Xuan Tho
7	Learning Validation for Lung CT Images by Multivariable Class Imbalance	Dao Nam Anh and Nguyen The Hoang
14	Intuition Based Autonomous Vehicle System	Manish Kumar Singh and Gopinath M. P.
15	An Efficient Privacy Preserving Search Scheme for Encrypted Cloud Data	Veningston K and P V Venkateswara Rao
19	Design and Implementation of an IoT-Based Water Purifier System Enabling Predictive Maintenance	Luong Vinh Quoc Danh, Dang Vu Minh Dung and Nguyen Duy Khanh
21	Grey Wolf Optimized Task Scheduling Algorithm in Cloud Computing	Nidhi Bansal and Ajay Singh
32	Non-Intrusive Load Monitoring Algorithms: A Comparative Study	Huu Hiep Nguyen
48	Internet of Things (IoT) and Deep Neural Network Based Intelligent and Conceptual Model for Smart City	Kalpna Gautam, Vikram Puri, Jolanda G Tromp, Nguyen Gia Nhu and Chung Van Le
52	Improving high quality in combination processing the high measurement signals	Nguyen Quang Vinh and Thoa Phamduc
53	Open Stack: Resources Allocation for Distributed Virtual Machine Peer to Peer	Nguyen Ha Huy Cuong, Nguyen Hong Minh, Doan Van Thang and Le Dac Nhuong
56	A Research for Reconstructing 3D Object by Using an RGB-D Camera	Van Sinh Nguyen, Manh Ha Tran and Quang Minh Anh Le
115	On Analysis of Suitable Wavelet Family for Processing of Cough Signals	Agam Srivastava, Dr. Vikrant Bhateja, Adya Shankar and Ahmad Taquee

**Session # 2 Special Session:
Computational Intelligence in Biomedical
Imaging**

Timings: 3:30 am to 5:30 am

**Session Chairs: Dr. Dang Viet Hung
Dr. Nguyen Hoang Phuong**

Room No. : 706

Paper ID	Paper Title	Authors
CIBI 2	Volkswagen vehicle identification via Multi-Layer Perceptron trained by improved artificial bee colony algorithm	Jingyuan Yang, Lei Wang, Qiaoyong Jiang
CIBI 3	Cerebral microbleeds detection via convolutional neural network with and without batch normalization	Jin Hong, Jie Liu
CIBI 6	Isolated Chinese sign language recognition using gray-level co-occurrence matrix and parameter-optimized medium Gaussian support vector machine	Xianwei Jiang
CIBI 5	Automatic Initial Boundary Generation Methods Based on Edge Detectors for the Level Set Function of the Chan-Vese Segmentation Model and Applications in Biomedical Image Processing	Dang N. H. Thanh, Nguyen Ngoc Hien, V. B. Surya Prasath, Le Thi Thanh, Nguyen Hoang Hai
CIBI 4	A Low-cost Internet of Things based Home Security System using Computer Vision	Hasan Salman, Md Arifur Rahman Nayeem, Asif Mohammad, Xiaodong Bai, MD Rezwan Mamun ,Md Mamun Ali, Asaduzzaman Peo

**Session # 3 Session on Fuzzy Systems,
Artificial Intelligence and Machine
Learning**

Timings: 1:30 pm to 05:30 pm

**Session Chairs: Dr. Anand Nayyar
Dr. K. VENINGSTON**

Room No. : 706

Paper ID	Paper Title	Authors
2	Colorectal Cancer Diagnosis with Complex Fuzzy Inference System	Tran Thi Ngan, Luong Thi Hong Lan, Tran Manh Tuan, Le Hoang Son, Le Minh Tuan and Nguyen Hai Minh
3	Fuzzy Min Max Neural Network and Genetic Algorithm in Liver Disease Diagnosis	Vu Dinh Minh, Tran Thi Ngan, Le Ba Dung, Nguyen Doan Cuong and Tran Manh Tuan
9	Model for Predictive Production	Bharat Sharma, Indrashis Das, Manjusha Pandey and Siddharth Rautaray
24	How to fairly allocate indivisible resources among agents having lexicographic subadditive utilities	Trung Thanh Nguyen
27	A Machine Learning approach for Hot Topic Detection in News	Tat-Huy Tran, Tan-Hung Le and Thi-Thu-Huyen Tran
29	A Proposal of Expert System using Deep learning Neural Networks and Fuzzy rules for Diagnosing Heart Disease	Hai Van Pham, Son Le Hoang and Tuan Le Minh
45	Domain-specific vs. General-Purpose Word Representations in Sentiment Analysis for Deep Learning Models	Hung Bui Thanh
46	Improvement of machine learning method by combining flow text and layout text in extracting information from scanned healthcare documents	Van-Minh Le and Thi Thanh Ha Hoang
51	GUI based Percentage Analysis for Cure Breast Cancer Survivors	Deblina Sarkhel Dhanashree Deka Debabrata Samanta Kumudavalli M.V Dac-Nhuong Le
63	Deep Convolutional Neural Networks for recognition of Historical Handwritten Kannada Characters	H T Chandrakala and G Thippeswamy
78	Three-way Decisions for Proposal Ranking	Sylvia Encheva
104	A Fuzzy Model of Diagnosis of Eight Syndromes and Internal Organs Syndromes in Traditional Vietnamese Medicine	Hoangphuong Nguyen
106	A new Approach using Hedge Algebra combined with Kansei Evaluation for Intelligent Disaster Decision Support and its Application	Hai Van Pham, Thuan Do Phan and Philip Moore
107	Vietnamese Document Classification using Hierarchical Attention Networks	Khanh Nguyen, Viet Anh Phan and Tuan Hao Hoang

DAY – II
Friday, 30 November 2018

**Session # 4 Next Generation
Communication Networks, Cyber Security & Computational Intelligence** **Timings: 8:30 am to 11:30 am**

Session Chairs: Prof. Sheng Lung Peng **Room No. : 712**
Dr. Nguyen Gia Tri

Paper ID	Paper Title	Authors
5	An enhanced multi-point interactive method for multi-objective evolutionary algorithms	Long Nguyen, Dinh Nguyen Duc and Hai Nguyen Thanh
8	Watermark by Learning Non Saliency	Dao Nam Anh, Pham Quang Huy and Luong Chi Mai
11	Optimization of G-O reliability model using TLBO algorithm	Dr.Sangeetha Yalamanchili and G.Jaya Laxmi Laxmi
16	Optimal Path Selection In Wireless Sensor Networks Using Enhanced Spatial Reusability	Santosh Patil Mothe Rakesh D Rahul
17	Application of additive codes over GF(4) on quantum error correction codes	Duc Manh Nguyen and Sunghwan Kim
18	Improved Generalized LED Index Modulation for Visible Light Communication	Manh Le Tran and Sunghwan Kim
23	Adaptive feature selection and classification using optimization technique	Naveen Nekuri and Sookshma Mandala
55	Digital Signature Algorithms based on Hidden Discrete Logarithm Problem	Alexandr Andreevich Moldovyan, Nikolay Andreevich Moldovyan, Phieu Ngoc Han and Nguyen Hieu Minh
57	Robot Path Planning Using Modified Artificial Bee Colony Algorithm	Anand Nayyar, Nguyen Gia Nhu, Rajani Kumari and Sandeep Kumar
59	FinRep: A Blockchain Approach for Financial Reputation	Balaji Rajendran, Anoop Kumar Pandey and Roshni V S
62	New Modes of Using Block Ciphers: Error Correction and Pseudo-probabilistic Encryption	Dmitriy Nikolaevich Moldovyan, Nikolay Andreevich Moldovyan, Ho Sy Tan, Le Quang Minh, Nguyen Hai Vinh and Nguyen Hieu Minh
79	A straightforward and robust M2M collaborative architecture using SMS in GSM networks	Sylvia Encheva and Sharil Tumin
99	Design and Implementation of Convolution Coding Technique in Industrial Automation	Varshitha Prakash and Dr. M. Ramesh Patnaik

Session # 5 Trends in Big Data and Web Technologies

Timings: 8:30 am to 11:30 am

**Session Chairs: Dr. Ha Nhu Hang
Dr. Le Thanh Long**

Room No. : 706

Paper ID	Paper Title	Authors
1	Privacy, security and policies: A review of problems and solutions with semantic web technologies	Tào Ngọc Biên, Đoàn Văn Ban and Phạm Thế Quế
25	A Novel Approach of Ontology-based Activity Segmentation and Recognition using Pattern Discovery in Multi-resident Homes	Duy Nguyen, Luong Nguyen and Minh Son Nguyen
31	Development of The Rules for Model Transformation with OCL Integration in UWE	Dien Tran Dinh, Thang Huynh Quyet and Khanh Tran Quoc
39	CraftQuest- Mobile App for collecting Craft Village Data	Thanh Binh Nguyen
40	Tracking Big5 traits based on mobile user log data	
43	Prediction of factors associated with the dropout rates of primary to high school students in India using Data Mining Tools	Ekansh Maheshwari, Chandrima Roy, Siddharth Rautaray and Manjusha Pandey
47	Assessing the Learning Difficulty of Text-Based Learning Materials	Saurabh Pal, Moutan Mukhopadhyay, Pijush Kanti Dutta Pramanik and Prasenjit Choudhury
49	Toward Vietnamese DBpedia chapter – the first step with Automatic Identification Types for Vietnamese Wikipedia Entities	Nhu Thi Nguyen and Dung Tuan Cao
50	Metadata based Ontological Framework for Semantic Query in Multilingual Databases	Ch V S Satyamurty, Dr J V R Murthy and M Raghava
60	Vietnamese tourism linked open data	Tiến Lê and Dũng Cao
108	Combining Pre-trained Word Embeddings and Domain-features in Bidirectional LSTM model for Vietnamese Keyword Extraction	Bui Thanh Hung
113	Bidirectional Independently Long Short-Term Memory and Conditional Random Field integrated model for Aspect Extraction in Sentiment Analysis	Uyen Trang Tran, Thanh Ha Hoang and Xuan Hiep Huynh