

2016 IEEE RIVF Final Program
November 07-09, 2016
Thuyloi University, Hanoi, Vietnam

Monday, November 07, 2016											
08:00-09:00	Registration Place: Lobby of University Auditorium										
09:00-09:30	Opening Session Master of Ceremonies: Phuong Nguyen Place: University Auditorium										
	Opening Speech by Honorary Chairs Nguyen Quang Kim & Douglas Zuckerman Welcome Speech by General Chairs Vincenzo Piuru & Tu-Bao Ho Program Summary by PC Chairs Tru Cao & Yo-Sung Ho										
09:30-10:30	Keynote Talk 1 IEEE's New Technology Initiatives and ComSoc's Leading Role Harvey Freeman - President of IEEE Communications Society Chair: Douglas Zuckerman Place: University Auditorium										
10:30-11:00	Coffee Break Place: University Conference Area										
11:00-12:30	<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="width: 50%; text-align: center;">Computational Intelligence and Big Data Analytics I (1L + 3R) Chair: Vincenzo Piuri Room: 5-K1</th> <th style="width: 50%; text-align: center;">Image, Language, and Speech Processing I (1L + 2R + 1S) Chair: Kang Hyeon Rhee Room: 3-K1</th> </tr> </thead> <tbody> <tr> <td>83 (L). Accelerating the Distributed Simulations of Agent-Based Models using Community Detection Antoniya Petkova, Martin Dimitrov, Charles Hughes and Narsingh Deo</td> <td>24 (L). New No-Reference Stereo Image Quality Method for Image Communication Ying Wang, Mei Yu, Fen Chen and Gangyi Jiang</td> </tr> <tr> <td>71 (R). About Cooperation of Multiagent Collective Products: An Approach in the Context of Cyber-Physical Systems Afra Khenifar, Jean-Paul Jamont, Michel Occello, Choukri-Bey Ben-Yelles and Mouloud Koudil</td> <td>17 (R). Blind Deblurring using Adaptive Image Model Ngoc Thuy Le and Ngoc-Minh Nguyen</td> </tr> <tr> <td>64 (R). A New Viral Marketing Strategy with the Competition in the Large-Scale Online Social Networks Van Canh Pham, Dung Ha, Quoc Dung Ngo, Chi Quang Vu and Xuan Huan Hoang</td> <td>31 (R). Fast Parallel Blur Detection of Digital Images Giang Son Tran, Thi Phuong Nghiem, Nhat-Quang Doan, Alexis Drogoul and Chi Mai Luong</td> </tr> <tr> <td>65 (R). An Improved Artificial Immune Network for Solving Construction Site Layout Optimization Duc Quang Vu, Van Truong Nguyen and Xuan Huan Hoang</td> <td>69 (S). An Approach to Counting Brown Planthopper in Images Containing Overlapping Individuals Tran Cong Nghi, Tran C. An and Hiep Huynh</td> </tr> </tbody> </table>	Computational Intelligence and Big Data Analytics I (1L + 3R) Chair: Vincenzo Piuri Room: 5-K1	Image, Language, and Speech Processing I (1L + 2R + 1S) Chair: Kang Hyeon Rhee Room: 3-K1	83 (L). Accelerating the Distributed Simulations of Agent-Based Models using Community Detection Antoniya Petkova, Martin Dimitrov, Charles Hughes and Narsingh Deo	24 (L). New No-Reference Stereo Image Quality Method for Image Communication Ying Wang, Mei Yu, Fen Chen and Gangyi Jiang	71 (R). About Cooperation of Multiagent Collective Products: An Approach in the Context of Cyber-Physical Systems Afra Khenifar, Jean-Paul Jamont, Michel Occello, Choukri-Bey Ben-Yelles and Mouloud Koudil	17 (R). Blind Deblurring using Adaptive Image Model Ngoc Thuy Le and Ngoc-Minh Nguyen	64 (R). A New Viral Marketing Strategy with the Competition in the Large-Scale Online Social Networks Van Canh Pham, Dung Ha, Quoc Dung Ngo, Chi Quang Vu and Xuan Huan Hoang	31 (R). Fast Parallel Blur Detection of Digital Images Giang Son Tran, Thi Phuong Nghiem, Nhat-Quang Doan, Alexis Drogoul and Chi Mai Luong	65 (R). An Improved Artificial Immune Network for Solving Construction Site Layout Optimization Duc Quang Vu, Van Truong Nguyen and Xuan Huan Hoang	69 (S). An Approach to Counting Brown Planthopper in Images Containing Overlapping Individuals Tran Cong Nghi, Tran C. An and Hiep Huynh
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	Dang Xuan Binh and Duong Tuan Anh	Van Hai Do, Nancy F. Chen, Boon Pang Lim and Mark Hasegawa-Johnson
	37 (R). Combining Transfer Learning and Co-training for Student Classification in an Academic Credit System Hoang Nguyen, Chau Vo and Hua Phung Nguyen	99 (R). Speed Up Temporal Median Filter and Its Application in Background Estimation Thanh-Sach Le, Nhu-Tai Do and Kazuhiko Hamamoto
	4 (R). An Effective GRASP+VND Metaheuristic for the k-Minimum Latency Problem Ban Ha Bang and Nguyen Duc Nghia	100 (R). Spatial and Spectral Features Utilization on a HyperSpectral Imaging System for Rice Seed Varietal Purity Inspection Hai Vu, Christos Tachtatzis, Paul Murray, David Harle, Kien Dao Trung, Lan Le Thi, Ivan Andonovic and Stephen Marshall
18:30-21:00	Reception Place: K1 Restaurant	
Tuesday, November 08, 2016		
09:00-09:30	Registration Place: Lobby of University Auditorium	
09:30-10:30	Keynote Talk 2 Big Data Initiatives in China: Opportunities and Challenges Joshua Huang - Director of Big Data Institute, Shenzhen University Chair: Tu-Bao Ho Place: University Auditorium	
10:30-11:00	Coffee Break Place: University Conference Area	
11:00-12:25	Computational Biomedicine I (1L + 2R + 1S) Chair: Thanh-Sach Le Room: 5-K1	Information, Language, and Speech Processing IV (1L + 2R + 1S) Chair: Thanh-Huong Le Room: 3-K1
	22 (L). Detection of Lesion Region in Skin Images by Moment of Patch Dao Nam Anh	96 (L). Towards a Syntactically and Semantically Enriched Lexicon for Vietnamese Processing Thi Huyen Nguyen, Minh Hai Nguyen, Thi Minh Huyen Nguyen and The Quyen Ngo
	10 (R). Real-Time Brainwave-Controlled Interface Using P300 Component in EEG Signal Processing Kha Ha and Kha Vo	44 (R). A Hybrid Approach to Vietnamese Word Segmentation Tuan-Phong Nguyen and Anh-Cuong Le
	38 (R). An Artificial Neural Network Approach for Electroencephalographic Signal Classification towards Brain-Computer Interface Implementation Hoang-Anh Nguyen, Hoang Tran, Tien-Dung Do, Thang Vu and Quyen Bui	61 (R). A Reordering Model for Vietnamese-English Statistical Machine Translation Using Dependency Information Viet Tran Hong, Huyen Vu Thuong, Thu Pham Hoai, Vinh Nguyen Van and Nguyen Le Minh
	29 (S). Imbalance Regulation for Identification of Abnormality in Medical Images Dao Nam Anh, Dang Xuan Tho, Ngo Quoc Tao and Bui Duong Hung	46 (S). Scoring and Ranking an Explanatory Sentence by Improving BM25E and SumWordLR Methods Trung Thien Vo, Bac Le and Nguyen Le Minh
12:25-14:00	Lunch Place: K1 Restaurant	
14:00-15:10	Computational Biomedicine II (1L + 2R) Chair: Ha-Duong Phan Room: 5-K1	Information, Language, and Speech Processing V (1L + 1R + 1S) Chair: Tuong-Vinh Ho Room: 3-K1
	52 (L). Detection of New Drug Indications from Electronic Medical Records Tran-Thai Dang, Phetnidda Ouankhamchan and Tu-Bao Ho	14 (L). Streaming Aspect-Sentiment Analysis Vu Le Anh, Chien Phung Van, Cuong Vu Cao, Linh Ngo Van and Khoat Than Quang
	3 (R). System Pharmacology: Application of Network Theory in Predicting Potential Adverse Drug Reaction Based on Gene Expression Data Duy Pham, Bao-Khanh Le, Tu-Bao Ho and Ly Le	63 (R). A Fast and Efficient Reversible Watermarking Method Using Generalized Integer Transform Luyen Cao Thi and At Pham Van
	94 (R). Assessing Human Disease Phenotype Similarity Based on Ontology Duc-Hau Le, Ba-Su Pham and Anh-Minh Dao	92 (S). An Ontology-Based Coreference Resolution Approach for Aspect-Level Sentiment Analysis Thuy Le Thi, Hung Vo Thanh, Trung Mai Duc, Tho Quan Thanh and Tuoi Phan Thi
15:10-15:40	Coffee Break Place: University Conference Area	
15:40-16:50	Computational Biomedicine III (1L + 2R) Chair: Ly Le Room: 5-K1	Communications and Networking I (1L + 2R) Chair: Huu-Thanh Nguyen Room: 3-K1
	82 (L). A Multi-Scale Model for Studying Spatial Epidemic Spreading in an Office Building Thu Le Kim, Doanh Nguyen Ngoc, Anh Nguyen Thi Ngoc, Nghi Huynh Quang and Edouard Amouroux	36 (L). An Estimation Scheme Based on Pairwise Broadcast to Synchronize Wireless Sensor Networks Nasiroh Chedoloh and Watcharapan Suwansantisuk
	74 (R) Quantifying the Effect of Synchrony on the Persistence of Infectious Diseases in a Metapopulation	40 (R) Searching of Best-effort Messages in TTEthernet Switches during the Timely Blocking Intervals Ekarin Suethanuwong and Sangnapa Hirunmutraporn

	Tran Thi Cam Giang, Marc Choisy and Jean Daniel Zucke		
	21 (R). A Frequency-Based Gene Selection Method with Random Forests for Gene Data Analysis Thanh Trinh, DingMing Wu, Salman Salloum, Tung Nguyen and Joshua Zhexue Huang	60 (R) Malicious HTTP Communication Detection Based on Access Graph Analysis Manh Cong Tran, Sei Kudo and Yasuhiro Nakamura	
Free Evening			
Wednesday, November 09, 2016			
09:30-10:30	Keynote Talk 3 From Communication Data to Human Behaviours in Task-Specific Activities: Case of Air Traffic Management Vu Duong - Director of John von Neumann Institute, VNU-HCM Chair: Vincenzo Piuri Place: University Auditorium		
10:30-11:00	Coffee Break Place: University Conference Area		
11:00-12:05	<p>Communications and Networking II (1L + 2R) Chair: Watcharapan Suwansantisuk Room: 1-K1</p> <p>55 (L) A RESTful Task Allocation Mechanism for the Web of Things El Mehdi Khalfi, Jean-Paul Jamont, Michael Mrissa and Lionel Medini</p> <p>70 (R) Load Balancing Using Multipath Routing in Network Functions Virtualization Tuan-Minh Pham and Linh Manh Pham</p> <p>53 (R) Performance Evaluation of Distributed File Systems under Cloud Computing Environment: Small-File Problem Thanh Duong and Quoc Luu</p>	<p>IEEE Volunteer Training Workshop</p> <p>Speaker: Vincenzo Piuri Room: 5-K1 (till 13:00)</p>	<p>Workshop on Vietnamese Language and Speech Processing Chair: Minh-Huyen T. Nguyen Room: 3-K1 (See presentation time at http://vlsp.org.vn)</p> <ul style="list-style-type: none"> • Opening • Report on Named-Entity Recognition Evaluation Campaign: Data and Systems, Nguyen Thi Minh Huyen, Vu Xuan Luong • Vietnamese Named Entity Recognition using Token Regular Expressions and Bidirectional Inference, Phuong Le-Hong
12:30-14:00	Lunch Place: K1 Restaurant		
14:00-15:05	<p>Software Engineering and Computational Intelligence (1R + 3S) Chair: Bich-Thuy Dong Room: 1-K1</p> <p>79 (R) Domain-Driven Design Patterns: A Metadata-Based Approach Duc Minh Le, Duc-Hanh Dang and Viet-Ha Nguyen</p> <p>43 (S) A Strongest Assumption Generation Method for Component-Based Software Verification Hoang-Viet Tran, Chi-Luan Le and Ngoc Hung Pham</p> <p>84 (S) Similarity Kernel for User-based Collaborative Filtering Recommendation System Quoc Nghia Phan, Hoai Phuong Dang and Xuan Hiep Huynh</p> <p>90 (S) An Approach Based on Max Flow Resolution for Minimizing Makespan of Personal Scheduling Problem Son Trang Hong, Huy Nguyen Van, Nguyen Huynh Tuong, Lang Tran Van and Ameer Soukhal</p>		<ul style="list-style-type: none"> • Named Entity Recognition in Vietnamese Text Using Conditional Random Fields, Vũ Anh, Lê Minh Tuấn, Nguyễn Việt Hưng • DSKTLAB-NER: Nested Named Entity Recognition in Vietnamese Text, Cam-Van Thi Nguyen, Thai-Son Pham, Thi-Hong Vuong, Ngoc-Vu Nguyen and Mai-Vu Tran • System Demo: VAIS-TTS: A High Quality Speech Synthesis Service for Vietnamese • System demo: Instrumentations controlled by Vietnamese voice, Viet Son Nguyen, Viet Tung Nguyen, Thi Ngoc Diep Do, Dang Khoa Mac • Report on Sentiment Analysis Evaluation Campaign: Data and Systems, Le Anh Cuong, Nguyen Thi Minh Huyen, Nguyen Viet Hung • DSKTLAB: Vietnamese Sentiment Analysis for Product Reviews, Quynh-Trang Thi Pham, Xuan-Truong Nguyen, Van-Hien Tran, Thi-Cham Nguyen and Mai-Vu Tran • A Simple Supervised Learning Approach to Sentiment Classification at VLSP 2016, Hy Nguyen, Tung Le, Viet-Thang Luong and Dien Dinh • System Demo: Technical report for land market information system, Duong Nguyen Thanh, Ha Nguyen and Tu Nguyen • Panel Discussion and Closing
15:05-17:05	<p>Tutorial 3D Video Processing Techniques for Immersive Environments Speaker: Yo-Sung Ho Room: 1-K1</p>	<p>Tutorial Finding Research Topics and Writing Scientific Papers Speaker: Tu-Bao Ho Room: 5-K1</p>	
18:30-21:30	Gala Dinner Place: Sen Ho Tay Restaurant		

Time for paper presentation including approximately 5 mins for Q&A:

- Long presentation (L): 30 mins
- Regular presentation (R): 20 mins
- Short presentation (S): 15 mins