

Final Programs

The 9th IEEE International Conference on Ubi-Media Computing

August 15-17, 2016
At Ararat Park Hyatt Moscow, Moscow, Russia,

Aug 15, 2016

Time	Role	Speaker (room A)	Topic
8:50 - 9:10			Registration and Opening
9:15 - 10:10	<u>Keynote 1:</u>	Assoc. Prof. Dr. Sisi Zlatanova Delft University of Technology, Netherlands	Smart Cities embrace Ubiquitous media
10:15 - 11:10	<u>Invited Talk 1:</u>	Prof. Dr. Martin Reiser Institute for Media Innovation, NTU, Singapore	What is Color
11:15 - 11:55	<u>Invited Talk 2:</u>	Prof. Dr. Jiannong Cao Hong Kong Polytechnic University, Hong Kong	Social Context Modelling and Recognition: Current Work and Future Directions
Lunch			
13:00 - 13:50	<u>Keynote 2:</u>	Prof. Dr. Qing Li City University of Hone Kong, Hong Kong	Event Detection from Multi-Modal Big Data and Multi-Dimensional Analysis based on Event Cube
14:00 - 14:35	<u>Invited Talk 3:</u>	Prof. Dr. Lian Li HeFei University of Technology, China Prof. Dr. Ning An HeFei University of Technology, China	Mobile Health Computing in Smart Elder Care
14:40 - 15:25	<u>Invited Talk 4:</u>	Prof. Dr. Wolfgang Heiden Bonn-Rhein-Sieg University of Applied Sciences, Germany	Edutainment off-limits-Bridging gaps between media, front-ends, and usage metaphors
15:30 - 16:25	<u>Invited Talk 5:</u>	Prof. Dr. Alexander V. Boukhanovsky ITMO University, Russia Prof. Dr. Alexandra O. Konradi ITMO University, Russia	Value-Based Healthcare Meets Ubiquitous Computing: Big Data vs. Simulation
16:30 - 17:45	Room A : Umedia-D1.A1 (5)		
17:45 - 19:00	Room A : Umedia-D1.A2 (5)		
Dinner Time	Banquet Keynote	Mr. Alexander Bugaev The Presidium of the Academy of Sciences (RAS), Russia	

Aug 15, 2016

Time\Room	A	Time\Room	B
	Keynote 1-2, Invited Talk 1-5		
		14:00 - 15:15	Umedia-D1.B1 (5)
16:30 - 17:45	Umedia-D1.A1 (5)	15:20 - 16:50	Umedia-D1.B2 (6)
17:45 - 19:00	Umedia-D1.A2 (5)	16.55 - 18.25	Umedia-D1.B3 (6)

Aug 16, 2016

Time\Room	Role	Speaker (room A)	Topic
9:00 - 10:15	<u>Keynote 3:</u>	Prof. Dr. Gwo-dong Chen National Central University, Taiwan	Digital theaters and drama based learning in a classroom

Aug 16, 2016

Time\Room	A	B	C
9:00 - 10:15	Keynote 3		
10:30 - 12:00	Umedia-D2.A1 (6)	Umedia-D2.B1 (6)	AEL-C1 (5)
Lunch			
13:30 - 14:45	Umedia-D2.A2 (5)	AEL-B1 (5)	AEL-C2 (5)
15:00 - 16:15	Umedia-D2.A3 (5)	PEWIN-B1 (6)	AEL-C3 (5)
16:30 - 18:00	Umedia-D2.A4 (5)	PEWIN-B2 (6)	AEL-C4 (6)

Aug 17, 2016

Time\Room	A
9:00 - 10:15	Panel Discussion
10:30 - 12:00	Committee Meeting

Umedia-D1.B1

Aug 15, 2016 [14:00 - 15:15]

No.	Title	Authors
1	A Novel Virtual CPE Architecture and Service for Enterprises with SDN Network Technologies	Nen Fu Huang, Che Wei Lin, Sheng Jung Wu, Chi Hsuan Li and I-Ju Liao
2	A Novel Self-Adaptive Route Optimization Scheme for Nested Mobile IPv6 NEMO Environment	Li Qiang and Jie Li
3	Using RSUs to Improve Message Broadcasting in VANETs	Chih-Lin Hu, Yu-Feng Hsu and Wen-Chih Yang
4	Improving Relay Node UE Performance by Combing Relay Node and Joint Transmission of LTE-A	Wei Kuang Lai and Pai-Mou Yang
5	The Enhanced Wi-Fi Offloading Using the Software Defined Network Based Device-to-Device Communication Paradigm for Ubiquitous Communication	Chung-Ming Huang, Rung-Shiang Cheng and Sheng-Yuan Pan

Umedia-D1.B2

Aug 15, 2016 [15:20 - 16:50]

No.	Title	Authors
1	Area-Delay Efficient Digit-Level Parallel-In-Serial-Out (PISO) Multiplication Based on Toeplitz Block Toeplitz Matrix-Vector Product Decomposition	Chiou-Yng Lee and Chia-Chen Fan
2	A Power-Efficient BitTorrent Scheme based on Bluetooth Ad-hoc Network for Handheld Devices	Chao-Hsien Lee and Li-Kang Hsieh
3	A Disaster Resilient Network based on OpenFlow and Cognitive Wireless Technologies	Yoshitaka Shibata, Goshi Sato, Noriki Uchida and Norio Shiratori
4	A Proxy-assisted DASH Live Streaming Scheme	Cheng Zhao, Li Song, Da Huo, Rong Xie and Nam Ling
5	Perceptually Constrained Pixel Dimming Algorithm with Weighted High-Frequency Spectrum Suppressor for AMOLED Displays	Peter Chondro and Shanq-Jang Ruan
6	Privacy-preserving Citizen Journalism	Tat Wing Chim, Siu Ming Yiu, Hui Lucas and Victor Li

Umedia-D1.B3

Aug 15, 2016 [16:55 - 18:25]

No.	Title	Authors
1	Performing Iris Segmentation by Using Geodesic Active Contour(GAC)	Yuan-Tsung Chang, Chih-Wen Ou, Timothy K. Shih and Yung-Hui Li
2	ASIC Oriented Fast Motion Estimation Algorithm Based on Locality Sensitive Hashed Signatures	Pavel Arnaudov and Tokunbo Ogunfunmi
3	A Social-Aware Video Segment Prefetching Mechanism for Mobile Users	Tz-Heng Hsu and Jhan-Rong Rao
4	Evaluation of H.265 and H.264 for Panoramas Video under Different Map Projections	Bijia Li, Li Song, Rong Xie and Nam Ling
5	Developing a Common Repository for Exchangeable Learning Objects	Yu-Ren Chen, Yi Chiou, Zhen-Rong Chen, Shu-Hao Liou, Chin-Lam Moh, Hai-Hui Wang, Jen-Hao Hsieh and Timothy K. Shih
6	Developing Intelligent Context Aware To-Do Service with Smart devices	Yeong-Sheng Chen and Pei-Han Chiou

Umedia-D1.A1

Aug 15, 2016 [16:30 - 17:45]

No.	Title	Authors
1	Class-Wise Data Reconstruction for Event Detection from Flickr Streaming Data	Zhenguo Yang, Qing Li, Wenyin Liu and Yun Ma
2	Grid-Based Index and Caching Scheme for Nearest Window Cluster Query Processing	Ting-Yu Su, Wen-Yueh Shih and Jiun-Long Huang
3	A High-Efficient Data Filter for Interactive-TV Rating System	Rong Sheng Wang, Shih-Chun Chou, Yung-Feng Lu, Yung-Lun Chen, Sheng-Chang Chen, Jhong-Syuan Li and Shi-Zhe Hong
4	Real-Time Hand Tracking and Guitar Chord Gesture Recognition in 3D Space	Chieh-Hung Liu, Enkhtogtokh Togootogtokh, Kuo-Chin Fan ,and Chun-Hong Huang
5	A Virtual 3D Harp Performance System	Yeh-En Huang, Timothy K. Shih, Andrey Klimenko and Stanislav Klimenko

Umedia-D1.A2

Aug 15, 2016 [17:45 - 19:00]

No.	Title	Authors
1	Face Recognition Base on Sub-space Approaches	Guan-Chih Chen, Qiangfu Zhao and Yan Pei
2	A Simple Human Stretch Action Recognition Using Region Space Models	Ting-Feng Ju, Shih-Sheng Chen and Shanq-Jang Ruan
3	Majors Recommendation for Students based on Vocational Interests	Ankhtuya Ochirbat, Timothy K. Shih and Lin Hui
4	Automatic Keyword Extraction Based on Taiwan Laws	Chih-Hao Chen, Ren-Hung Hwang, Chin-Feng Lai and Amy Shee
5	Skill Analysis in Sports Videos Using Animated Pose Templates	Jui-Yuan Su, Shyi-Chyi Cheng, Wan-Hsuan Yu and Po-Fu Hsiao

Umedia-D2.A1

Aug 16, 2016 [10:30 - 12:00]

No.	Title	Authors
1	Revisiting Reversible Data Hiding Schemes based on Prediction-Error-Expansion Techniques	Chia-Yuan Chang, Jen-Chun Chang, Yi-Zhi Lu, Hsin-Lung Wu and Ya-Shin Yao
2	Calculation of Cognitive Complexity of a software with Ubiquitous Computing	Dinuka Wijendra and Kamalanath Hewagamage
3	Discovering Stay Locations from GPS Trajectories	Te-Hsuan Liu and Yu-Ling Hsueh
4	Precise Object Detection using Iterative Superpixel Grouping Method	Cheng-Chang Lien
5	ROBUST MOVING OBJECT DETECTION UNDER VARYING LIGHTING CONDITIONS USING UBIQUITOUS VIRTUAL GATE ALGORITHM	Daw-Tung Lin, Chen-Hsiu Lee, Wei-Teng Weng and Chi Huaung
6	Situational Analysis on Readiness for Online Education in Sri Lankan Universities	Sanjeewanie H.D. Senanayake, Kamalanath P. Hewagamage and Enosha Hettiarachchi

Umedia-D2.A2

Aug 16, 2016 [13:30 - 14:45]

No.	Title	Authors
1	RETRIEVING CONTENT KNOWLEDGE WITH SIMULATED HOUSING ACTIVITIES USING WEB MAPPING TECHNOLOGY	Te-Hua Wang and Neil Y. Yen
2	A Hybrid Method for Visitor Localization and Tracking in a Museum Environment	Hoang Tran Vu, Hung Nguyen Manh, Wei-Chi Chang, Wei-Yuan Lin, Hung-Sheng Cheng, Yi-Ning Chuang and Ching-Chun Huang
3	Source Identification for Printed Arabic Characters	Min-Jen Tsai and Imam Yuadi
4	Mining Positive and Negative Sequential Patterns in a Progressive Database	Yong-Bin Wu, Jen-Wei Huang and Bijay Prasad Jaysawal
5	Parts Alignment Based Clothing Retrieval	I-Cheng Chang and Hsuan - Ying Liao

Umedia-D2.A3

Aug 16, 2016 [15:00 - 16:15]

No.	Title	Authors
1	Design and Implementation of a Greener Home Automation System	Manav Jaiswal, Yuhong Liu and Nam Ling
2	Real-Time Image-based Remote Respiratory Rate Measurement	Kuan-Yi Lin, Guo-Ruei Chen, Duan-Yu Chen, Wen-Jiin Tsai and Chih-Min Lin
3	A NOVEL CONTENT-BASED PIXEL RECONSTRUCTION SCHEME FOR ERROR CONCEALMENT APPLICATION	Huang-Chia Shih and Chiung-Ting Wang
4	The Government Data House prices Prediction System	Chih-Pin Liang, Shyan-Ming Yuan, Chia-Chen Fan and Chiou-Yng Lee
5	A Simple Eelectrocardiography Stegenography by Offset Coefficient Approach	Ching-Yu Yang and Wen-Fong Wang

Umedia-D2.A4

Aug 16, 2016 [16:30 - 18:00]

No.	Title	Authors
1	Designing an M-Learning Application for Mobile Assisted Language Learning	Fazeena Jamaldeen, Kamalanath Hewagamage, Yamaya Ekanayaka and Upul Rathnayake
2	A Rehabilitation Guidance System Based on Microsoft Kinect	Jia-Ying Lin and Chia-Hung Yeh
3	VISUAL NAVIGATION USING SYMMETRICAL SURFS	Chong-Po Liao, Jun-Wei Hsieh, Hui-Fen Chiang, Chih-Ming Lin and Yu-Chi Shih
4	Neural Network-Based Modeling of ECG and It's Application to Healthcare	Jengyung Chen and Qiangfu Zhao
5	A Designable Face-to-Face Interaction Gaming Platform by Using Near Field Communication	Wei-Hsun Lee and Chung-Chieh Hsu
6	Using Game-Based Learning to Support Student Engagement: Implications for Knowledge Construction	Rong-Chi Chang and Liang-Yi Chung

Umedia-D2.B1

Aug 16, 2016 [10:30 - 12:00]

No.	Title	Authors
1	Meet by Phone - The Application and Study of Pinch in Smart Phone Netart	Chiu-Wen Wang, Su-Chu Hsu and Shih-Wei Sun
2	Air Manipulation: A Manipulation System using Wearable Device of Camera Glasses in Smart Mobile Projector System	Xin-Mao Huang, Can-Rong Zhang and Yi Chiou
3	Conversion Mechanism between Exchangeable Learning Object and Google Course Builder	Shu-Hao Liou, Timothy K. Shih, W. K. T. M. Gunarathne and Jin-Tan Yang
4	Air Signature Recognition using Hidden Markov Model	Ika Kusumaning Putri, Hanas Subakti, Sufia Adha Putri and Li Yung-Hui
5	Software Implementation of Promotional Code Based Conversion Tracking in Internet Marketing	Ekaterina Khramtsova and Evgeny Pyshkin

PEWIN-B1

Aug 16, 2016 [15:00 - 16:15]

No.	Title	Authors
1	Dynamic path planning for mobile beacons in wireless sensor network localization	Wen Ouyang, Hao-Chun Hsieh, and C. S. James Wong
2	Graph-based Asymmetric Opportunistic Networks	Chang Wu Yu, Tung-Kuang Wu, Rei Heng Cheng, and Ko-Jui Lin
3	Design an Efficient Travel Itinerary Planning Based on Dynamic Depth-First Search Algorithm	Shih-Shih Chi, Kun-Ming Yu, and Wen Ouyang
4	A Personalized Ecological Recommendation Navigation System	Jo-Chi Chiu, Kun-Ming Yu and Ming-Gong Lee
5	An Efficient Parallel Apriori Algorithm Based on Spark Computing Framework	Chin-Hsiang Yu, Kun-Ming Yu, and Hong Zhou

PEWIN-B2

Aug 16, 2016 [16:30 - 18:00]

No.	Title	Authors
1	An Intelligent Emergency Evacuation System Based on Multiple Guidance Technology	Huan-Po Hsu, Kun-Ming Yu, Cheng-Chang Lien, Shao-Tsai Cheng, Ching-Lin Lee, Ming-Yuan Lei and Nancy Tsai
2	Development of a Blended Context-Aware Ubiquitous Learning System	Chuang-Kai Chiou and Judy C.R. Tseng
3	Machine-to-Machine Communications in Cellular Systems	Nian Xia and Chu-Sing Yang
4	A Metric Learning Framework based on Feature Line Embedding for Person Re-identification	Cheng-Ta Hsieh, Chin-Chuan Han, and Kuo-Chin Fan
5	Precise Object Detection using Iterative Superpixel Grouping Method	Cheng-Chang Lien, Yu-Wei Lin, I-Ting Lin, and Fu-Yu Teng
6	A Robust Palm-Print Recognition Method	Yea-Shuan Huang and Tzu-Shuan Yeh

AEL-B1

Aug 16, 2016 [13:30 - 14:45]

No.	Title	Authors
1	English learning android system device for kids in bath	Shian-Chi Meng, Sheng-Chih Chen and Tsai-Yen Li
2	Using programming contest in teaching introductory programming course: an experience	George Chernishev, Ekaterina Balakina, Artem Mukhin, Grigory Pervakov, Gleb Zakharov, Kirill Smirnov, Anna Smirnova and Boris Novikov
3	Digital Storytelling for Improving Students' Programming Literacy	Li-Ling Hu, Shian-Shyong Tseng and Jui-Feng Weng
4	An e-Learning system for programming languages	Lih-Shyang Chen, Emily Yang and Shu-Han Chang
5	An Effective Way of Promoting Scientific literacy in Big Data Era	Hsiang Hua, Guo Chaoyou and Mao Chengjie
6	Building a Web-based Environment to Support the Scientific Inquiry-based Learning in Nature Science	Jun-Ming Su and Shian-Shyong Tseng

AEL-C1

Aug 16, 2016 [10:30 - 12:00]

No.	Title	Authors
1	Applying speech-to-text recognition in lectures: a study on learning performance, attention, and meditation	Rustam Shadiev , Shavkat Sharipov, Ganisher Rakhimov, Yueh-Min Huang and Wu-Yuin Hwang
2	A Game-based Learning Framework for Productivity Tools based on Procrastination Theory	Kuo-Chen Li, Shein-Yung Cheng and Chi-Wei Wang
3	Development of mindtools integrated ubiquitous augmented reality learning environment to investigate student cognitive load	Pohan Wu and Hanyu Sung
4	A Study of Handwriting Rhythm Measurement of Chinese Character Based on Digital Handwritten Platform	Lunyi Yang and Yi Li
5	A Taiwanese Singing Voice Synthesizer Using Speech Analysis and Synthesis WORLD	Chih-Fang Huang and Yu-Chen Tang

AEL-C2

Aug 16, 2016 [13:30 - 14:45]

No.	Title	Authors
1	Predicting assessment difficulty in long tail data--a machine learning approach	Chih-Chang Yu , Jui-Long Hung and Hsu-Yung Cheng
2	Assessment Methods in Honor-Code MOOCs and Learner Flexibility	Laxmisha Rai, Nongliang Sun and Chunrao Deng
3	Learning State Machine Modeling for Context-aware Mobile Learning	Yuan-Kai Wang and An-Ping Chiang
4	Cognitive Assessment Evaluation of CSCL-based on NetGuru Platform and CSPL-based on TAOd Platform for Network Experiment	Yung-Hui Chen, Chun-Hsiung Tseng, Wei-Chun Lee, Lawrence Y. Deng and Long-He Lee
5	Driving Effective & Collaborative Mobile learning	Maitanmi S. O, Ogbonna A. C and Adekola Bukola D.

AEL-C3

Aug 16, 2016 [15:00 - 16:15]

No.	Title	Authors
1	The effects of attention monitoring with EEG biofeedback on university students' attention and self-efficacy	Jerry Chih-Yuan Sun and Katherine Pin-Chen Yeh
2	The Effect of Manga-Based E-book on Reading Comprehension in Japanese Learning: A Pilot Eye Tracking Study	Chun-Chia Wang, Hong-Fa Ho, Guan-An Chen and Hui-Sheng Su
3	EFL onscreen reading in both non-testing and testing scenarios-preliminary evidence from eye movements	Ming-Yi Hsieh and San-Ju Lin
4	The Design and Development of Constructivist Web-Based Learning Environment Model to Enhance Human Learning Efficiency Based on Brain-Based Learning: Integrated with Neuroscience	Wanwisa Wannapipat and Assoc.Prof.Dr.Sumalee Chaijaroen
5	Developing and Evaluation of a Mobile-based APP e-Bookcase System	Ying-Hung Pu, Po-Sheng Chiu, I-Ching Chao, Chih-Chien Kao and Yueh-Min Huang

AEL-C4

Aug 16, 2016 [16:30 - 18:00]

No.	Title	Authors
1	Approaching the satisfaction of ubiquitous learning in flipping classroom for basketball sport literacy	Tosti H. C. Chiang , Mei-Chun Lin, Wei-Ching Wang and Fan Chia
2	Are Interactive Types in Flipped Classroom Affected by the Display Interface Designed in the Smartphone Application?	Ting-Chia Hsu, Sten Govaerts, Adrian Holzer and Denis Gillet
3	The Learning Effectiveness of Flipped Classroom Combines Cooperative Learning in Microsoft Office Operation	Yujen Chen and Ching-I Cheng
4	ICT across Kuwait's National Curriculum	Hasibah Mohammad and Sayyora Rakhmankulova
5	Strategies and Methodology for Efficient Learning Activities Design by Crowdsourcing	Chunyan Yu, Shouchao Guo, Shenghui Zhao, Zhihong Xu and C.H. Kuo