



# Conference Agenda

08.06 - 08.09

@ Bali, Indonesia

The 12th IEEE International Conference  
on Ubi-Media Computing & Workshops

Umedia 2019 Conference Agenda			
Aug 6th	Day1		
	Executive Meeting		
	Preliminary Discussions		
Aug 7th	Conf.Day2 : Room1	Conf.Day2 : Room3	Conf.Day2 : Room2
08:00	Registration		
8:30 - 9:00	Welcome Session		
9:00 - 9:30	Opening Conference		
09:30 - 10:20	UI1 :Umedia Keynote Speaker : Prof. Nen-fu Huang		
10:20 - 10:30	Break	Break	Break
10:30 - 12:00	U1 : Ubi-media paper	U5 : Ubi-media paper	A1 : AEL paper
12:00- 13:00	Lunch	Lunch	Lunch
13:00 - 14:30	U2 : Ubi-media paper	U6 : Ubi-media paper	A2 : AEL paper
14:30 - 14:40	Break	Break	Break
14:40 - 16:10	U3 : Ubi-media paper	U7 : Ubi-media paper	A3 : AEL paper
16:10 - 17:30	U4 : Ubi-media paper	U8 : Ubi-media paper	A4 : AEL paper
18:30 - 20:30	Welcome Reception		
Aug 8th	Conf.Day3 : Room1	Conf.Day3 : Room3	Conf.Day3 : Room2
9:30 - 10:20	UI2 :Umedia Keynote Speaker : Prof. Lap-Pui Chau		
10:20 - 10:30	Break	Break	Break
10:30 - 12:00	U9 : Ubi-media paper	MI1 : MIOT paper	A5 : AEL paper
12:00- 13:00	Lunch	Lunch	Lunch
13:00 - 14:30	U10 : Ubi-media paper	ML1 : MLMA paper	
14:30 - 14:40	Break	Break	Break
14:40 - 16:10	U11 : Ubi-media paper	ML2 : MLMA paper	
16:10 - 17:30	Best Paper Award & Closing		
18:30 - 20:30	Banquet & Networking		
Aug 9th	Day4		
	Local Committee Meeting		
	Academic Discussions and Local Tour		

**Ubi-media 2019 Program**  
**August 6-9, 2019**

<b>UI1</b>	<b>August 7th, 9:30 - 10:20</b> Session Chair: Prof. Timothy K. Shih
	Conference and Ubi-media Keynote Speaker: Prof. Nen-fu Huang

<b>Session</b>	<b>August 7th, 2019 @Room 1</b>
<b>U1</b>	<b>10:30 - 12:00</b> Session Chair: Prof. Jiun-Long Huang, Taiwan
2	A Collaborative DDoS Defense Platform Based on Blockchain Technology Lo-Yao Yeh, Jiun-Long Huang, Ting-Yin Yen and Jen-Wei Hu
7	Security Storage Based on Fountain Code and XOR Encryption in Edge Computing Rui Xu, Zhenjiang Zhang, Bo Shen, Yanran Zeng and Chenyang Dai
73	A Novel Preprocessing Method for Solving Long Sequence Problem in Android Malware Detection Yi-Ming Chen, Cheng-Hao Hsu and Guo-Chung Chen
79	Cloud Technology: Opportunities for Cybercriminals and Security Challenges Leo Willyanto Santoso

<b>Session</b>	<b>August 7th, 2019 @Room 1</b>
<b>U2</b>	<b>13:00 - 14:30</b> Session Chair: Prof. I-Cheng Chang, Taiwan
5	The Matters of Deep Reinforcement Learning Toward Practical AI Applications Tipajin Thaipisutikul, Yi-Cheng Chen, Lin Hui, Sheng-Chih Chen, Pattanasak Mongkolwat and Timothy K. Shih
9	Mixed word representation and minimal Bi-GRU model for sentiment analysis Yanping Fu, Yun Liu, Yajing Wang, Yong Cui and Zhiyuan Zhang
10	Aspect-based sentiment analysis with the multiple-element attention and part of speech Ning Liu, Bo Shen, Kun Mi, Mingdong Sun and Naiyue Chen
72	A Novel Evolution-Based Recommendation System Yi-Cheng Chen, Yen-Lung Chu, Lin Hui, Sheng-Chih Chen, Tipajin Thaipisutikul and Kai-Ze Weng

Session	<b>August 7th, 2019 @Room 1</b>
U3	<b>14:40 - 16:10</b> Session Chair: Prof. Ahmad Wali Satria Bahari Johan, Indonesia
76	<b>An Efficient Artificial Intelligence Framework for UAV Systems</b> <a href="#">Enkhtogtokh Togootogtokh, Sunan Huang, Wai Lun Leong, Swee Huat Rodney Teo, Gian Luca Foresti, Christian Micheloni and Niki Maritnel</a>
84	<b>Constructing Movie Domain Knowledge Graph Based on LOD</b> <a href="#">Qiuyu Lei and Yun Liu</a>
4	<b>Generating a 3D Hand Model from Position of Fingertip using Image Processing Technique</b> <a href="#">Natthapach Anuwattananon, Shwu-Huey Yen and Somchoke Ruengittinun</a>
66	<b>Stairs Descent Identification for Smart Wheelchair by Using GLCM and Learning Vector Quantization</b> <a href="#">Ahmad Wali Satria Bahari Johan, Fitri Utaminingrum and Timothy K. Shih</a>

Session	<b>August 7th, 2019 @Room 1</b>
U4	<b>16:10 - 17:30</b> Session Chair: Prof. Ankhtuya Ochirbat, Mongolia
8	<b>An Intelligent Interactive Visualizer to Improve Blended Learning in Higher Education</b> <a href="#">Rangana Jayashanka, K.P. Hewagamage and E. Hettiarachchi</a>
14	<b>Automatic book generation by using ICT Job-Skills and Computing Curricula</b> <a href="#">Ankhtuya Ochirbat, Chalothon Chootong, Worapot Sompool, Gunarathne W.K.T.M. and Timothy K. Shih</a>
77	<b>Improving the Vocabulary Learning by Personalized Proficiency</b> <a href="#">Yi-Zhen Lin, Jen-Wei Huang and Kai-Hsiang Chen</a>
3	<b>Study on correctness judgement of handwritten Chinese characters based on feature matrix for similarity matching</b> <a href="#">Juying Wu, Qing Han and Yi Li</a>

Session	<b>August 7th, 2019 @Room3</b>
U5	<b>10:30 - 12:00</b> Session Chair: Prof. K. Priyantha Hewagamage, Sri Lanka
13	<b>Critical Success Factors of Analysing User Emotions to Improve the Usability of Systems</b> Wasura D. Watterarachchi, K. Priyantha Hewagamage and Enosha Hettiarachchi
17	<b>Application of hand recognition system based on electromyography and gyroscope using deep learning</b> Tsai-Ni Yang, Chuan-Feng Chiu, Timothy K. Shih, Chi-Yen Lin, Lin Hui and Fitri Utaminingrum
18	<b>The Design of Real-Time Digital Clothing Projection System</b> Hong-Nien Chen, Chuan-Feng Chiu, Timothy K. Shih, Chi-Yen Lin, Fitri Utaminingrum and Lin Hui
20	<b>DEEP REAL-TIME HAND DETECTION ON EMBEDDED SYSTEMS</b> Ping-Yang Chen, Jun-Wei Hsieh, Christopher Chan and Munkhjargal Gochoo

Session	<b>August 7th, 2019 @Room3</b>
U6	<b>13:00 - 14:30</b> Session Chair: Prof. Yung-Hui Li, Taiwan
23	<b>Four Categories Vehicle Detection in Hsuehshan Tunnel via Single Shot Multibox Detector</b> Chun-Ming Tsai, Tawei David Shou, Jun-Wei Hsieh and Kuang-Hsuan Chen
56	<b>TEMPORAL ACTION DETECTION BASED ON HIERARCHICAL OBJECT DETECTION NETWORKS</b> Yi-Hui Wu, Wen-Jiin Tsai and Hua-Tsung Chen
62	<b>Clinically Applicable Deep Learning for Diagnosis of Diabetic Retinopathy</b> Yung-Hui Li, Nai-Ning Yeh, Kartika Purwandari and Latifa Nabila Harfiya
67	<b>A Deep Learning Approach for Dynamic Object Understanding using SIFT.</b> Yuan-Tsung Chang and Timothy K. Shih

Session	<b>August 7th, 2019 @Room3</b>
U7	<b>14:40 - 16:10</b> Session Chair: Prof. Nam Ling, USA
19	<b>Non-MPM Mode Coding for Intra Prediction in Video Coding</b> <a href="#">Taru Kanchan, Minqiang Jiang and Nam Ling</a>
55	<b>An Adaptive Stereoscopic Video Streaming Mechanism using MV-HEVC and 3D-HEVC Technologies</b> <a href="#">Tz-Heng Hsu, Po-Hui Wu, Gwo-Jiun Horng, Chao-Chun Chen and Mao-Yuan Pai</a>
59	<b>Traffic Flow Forecast for Traffic with Forecastable Sporadic Events</b> <a href="#">Hung-Chin Jang and Yu-Hsiang Chang</a>
64	<b>Resolving IGMP Difference among Routers and Devices for Improving Interconnectivity in Home Networks</b> <a href="#">Moe Hamamoto, Takashi Murakami, Hiroshi Sugimura and Masao Isshiki</a>

Session	<b>August 7th, 2019 @Room3</b>
U8	<b>16:10 - 17:30</b> Session Chair: Prof. Shih-Ching Yeh, Taiwan
69	<b>Motorcyclists' Head Motions Recognition by Using the Smart Helmet with Low Sampling Rate</b> <a href="#">Yu-Ren Chen, Chang-Ming Tsai, Ka-Lo Wong, Tzu-Chang Lee, Chee-Hoe Loh, Jia-Ching Ying and Yi-Chung Chen</a>
82	<b>Facial Expression Recognition: A Comparison of Bottleneck Feature Extraction</b> <a href="#">Prasitthichai Naronglerdrit</a>
54	<b>OPINION MINING ON E-COMMERCE DATA USING SENTIMENT ANALYSIS AND K-MEDOID CLUSTERING</b> <a href="#">Untung Rahardja, Taqwa Hariguna and Wiga Maulana Baihaqi</a>

<b>UI2</b>	<b>August 8th, 9:30 - 10:20</b> Session Chair: Prof. Timothy K. Shih
	Conference and Ubi-media Keynote Speaker: Prof. Lap-Pui Chau

<b>Session</b>	<b>August 8th, 2019 @Room 1</b>
<b>U9</b>	<b>10:30 - 12:00</b> Session Chair: Prof. Pattanasak Mongkolwat, Thailand
52	Assistive Robot with Action Planner and Schedule for Family Supanut Konggern, Naphssorn Kaibutr, Nawaporn Konru, Thitinan Tantidham, Chih-Lin Hu, Tipajin Thaipisutikul, Timothy K. Shih and Pattanasak Mongkolwat
65	Improving Performance of DeepCC Tracker by Background Comparison and Trajectory Refinement Kuan-Hsien Wu, Wan-Lun Tsai, Tse-Yu Pan and Min-Chun Hu
80	Apply A* Search for Robot Path Finding Anuwat Angkuldee, Kuei-Ping Shih and Somchoke Ruengittinun

<b>Session</b>	<b>August 8th, 2019 @Room 1</b>
<b>U10</b>	<b>13:00 - 14:30</b> Session Chair: Prof. Susanto Rahardja, China
6	Development of a 3D Virtual Reality Mobile Navigation System for Geopark Ching-Sheng Wang, Meng-Lung Lin and Pin-Yu Chen
22	A Kinect-based System for Stroke Rehabilitation Shih-Ching Yeh, Si-Huei Lee, Rai-Chi Chan and Shuya Chen
71	Markerless Indoor/Outdoor Augmented Reality Navigation Device Based on ORB-Visual-Odometry Positioning estimation and Wall-Floor-Boundary Image Registration Chian C. Ho, Ming-Che Ho and Chuan-Yu Chang
81	A Hybrid Approach for Mobile Phone Clustering With Speech Recordings Mou Wang, Xiao-Lei Zhang and Susanto Rahardja

Session	<b>August 8th, 2019 @Room 1</b>
U11	<b>14:40 - 16:10</b> Session Chair: Prof. Chih-Lin Hu, Taiwan
16	A whole slide Ki-67 proliferation analysis system for breast carcinoma <b>Chien-Chuan Ko, Chih-Hung Chuang, Chuan-Yu Chang, Chun-Hung Lin, Shih-Hao Chang and Ji-Han Jiang</b>
53	A medical PBL system for clinical diagnosis training in medical education <b>Lih-Shyang Chen, Shu-Han Chang, Chih- Ching Emily Yang and Chao-Cheng Chen</b>
63	An Electronic Medical Record Management System based on Smart Contracts <b>Yeong-Sheng Chen, Wei-Kai Yang and Jie-Si Chen</b>
85	Scalable Master-Slaver Isomorphic Module for IoT Service System <b>Wen-Yo Lee, Ti-Hung Chen, Ching-Long Shih and Yung-Hui Chen</b>

**MIoT & MLMA 2019 Program**  
**August 6-9, 2019**

Session	<b>August 8th, 2019 @Room3</b>
MI1	<b>10:30 - 12:00</b> Session Chair: Prof. Jiun-Yu Tu, Taiwan
5	Pushing the Digital Notice Board toward Ubiquitous based on the Concept of the Internet of Everything <b>Peng-Wen Chen, Yung-Hui Chen and Yi-Hsien Wu</b>
6	Cognitive Learning Performance Assessment and Analysis with CPBL Applied on Arduino Module Programming for Non-CS Students <b>Yung-Hui Chen, Peng-Wen Chen, Wei-Chun Lee, Chun-Hsiung Tseng, Jiun-Yu Tu and Chia-Chung Yeh</b>
7	VA algorithm for Elderly's Falling Detection with 2D-Pose-estimation <b>Potsawat Wosri, Pitchayakul Jenpoomjai, Chih-Lin Hu and Somchoke Ruengittinun</b>
3	A Tool-Set for Physical Signal Collection <b>Chun-Hsiung Tseng, Yung-Hui Chen and Jia-Rou Lin</b>



MLMA 2019 Program

August 6-9, 2019

Session	<b>August 8th, 2019 @Room 3</b>
ML1	<b>13:00 - 14:30</b> Session Chair: Prof. Yi-Cheng Chen, Taiwan
1	<b>DeepBonds: A Deep Learning Approach to Predicting United States Treasury Yield</b> <a href="#">Jia-Ching Ying, Yu-Bing Wang, Chih-Kai Chang, Ching-Wen Chang, Yu-Han Chen and Yow-Shin Liou</a>
2	<b>Application of Hammerstein-Wiener Recurrent Neural Network to Accelerate Time-Series Skyline Queries</b> <a href="#">Chee-Hoe Loh, Sheng-Min Chiu and Yi-Chung Chen</a>
4	<b>Automatic Signboard Detection and Semi-Automatic Ground Truth Generation</b> <a href="#">Chen-Ya Hong, Chih-Yang Lin and Timothy K. Shih</a>
5	<b>Sports Video Segmentation Using Multi-model Content Analysis</b> <a href="#">Huang-Chia Shih and Kok-Hong Ho</a>

Session	<b>August 8th, 2019 @Room 3</b>
ML2	<b>14:40 - 16:10</b> Session Chair: Prof. Chih-Yang Lin, Taiwan
6	<b>Unsupervised Multi-class Cosegmentation</b> <a href="#">I-Cheng Chang and Tzu-Chiang Wang</a>
8	<b>Forming the Best Team for a Composite Competition</b> <a href="#">Ya-Wen Teng and Chih-Hua Tai</a>

**AEL2019 Program**

**August 6-9, 2019**

<b>Session</b>	<b>August 7th, 2019 @Room 2</b>
<b>AEL1</b>	<b>10:30 - 12:00</b> Session Chair: Prof. Rustam Shadiev, China
1	Effect of Ubiquitous Physics App on Learning Achievements in Authentic Contexts <a href="#">Siska Wati Dewi Purba and Wu-Yuin Hwang</a>
2	Target-Monitoring Learning Companion Design <a href="#">Yung-Tzu Joyce Lin, Shein-Yung Cheng and Meng-Yen Tom Lin</a>
6	Comparing effects of speech-to-text recognition versus speech-enabled language translation on cognitive load <a href="#">Rustam Shadiev, Narzikul Shadiev, Mirzaali Fayziev and Barry Lee Reynolds</a>

<b>Session</b>	<b>August 7th, 2019 @Room 2</b>
<b>AEL2</b>	<b>13:00 - 14:30</b> Session Chair: Prof. Ting-Ting Wu, Taiwan
7	A Framework for Mobile Meaningful Plant Learning to Improve Natural Science Learners' Performance <a href="#">Nadia Parsazadeh, Han-Chieh Chao, Yueh-Min Huang, Peiyu Cheng and Ting-Ting Wu</a>
20	To investigate an instant translation for assisting students' understandings of lecture slides <a href="#">Chaknarin Kongcharoen</a>
11	Wireless Sensor Network for Monitoring of Water Quality for pond Tilapia <a href="#">Tanomsak Wongmeekaew, Sarawoot Boonkirdram and Songgrod Phimphisan</a>

<b>Session</b>	<b>August 7th, 2019 @Room 2</b>
<b>AEL3</b>	<b>14:40 - 16:10</b> Session Chair: Prof. Jun-Ming Su, Taiwan
12	An active learning strategy driven by course crowdsourcing and crowdvoting <a href="#">Haibao Chen, Deru Song and Yuyan Zhao</a>
14	Research on Behavior Patterns of School Administrators in the MOOC of ICT Leadership <a href="#">Xiaowei Zhao and Shusheng Shen</a>
15	A Scheme to Create Simulated Test Items for Facilitating the Assessment in Web Security Subject <a href="#">Jun-Ming Su</a>

Session	<b>August 7th, 2019 @Room 2</b>
AEL4	<b>16:10 - 17:30</b> Session Chair: Prof. Siriporn Sansri, Thailand
16	Structural Relationships among In-Service Teacher's Behavioral Intention, Perceived Usefulness, Perceived Ease of Use and Online Professional Development System Quality <a href="#">Davaanyam Tumenbayar, Amarzaya Amartuvshin and Tserendorj Navchaa</a>
17	What Motivates Learners' Intention to Use Blackboard Mobile Learning (BML)?: Evidence from Thailand <a href="#">Nattaporn Thongsri and Yukun Bao</a>
18	ICT Curriculum Requirements in the Service Area of Champasak University, Laos <a href="#">Suparp Kanyacome, Pitak Paksanondha, Souksan Vilavong and Piyanuch Jaikaew</a>
19	Design and Implementaion of Smart Small Aquaponics System <a href="#">Siriporn Sansri, Wu-Yuin Hwang and Teerasak Srikumpa</a>

Session	<b>August 8th, 2019 @Room 2</b>
AEL5	<b>10:30 - 12:00</b> Session Chair: Prof. Gheorghita Ghinea, UK
8	PassSmell: Using Olfactory Media for Authentication <a href="#">Anas Ali Alkassabeh, Gheorghita Ghinea and Wu-Yuin Hwang</a>
21	Effects of Troubleshooting Tasks with Prompt Information on Students' Transfer Performance in Robotics Education <a href="#">Qiuju Si and Baichang Zhong</a>
22	The Investigation of Primary School Students' Cooperative and Competitive Personality in Robotics Course <a href="#">Liyang Xia and Baichang Zhong</a>

