



MCAIT 2018

The 4th International Multi-Conference on
ARTIFICIAL INTELLIGENCE TECHNOLOGY

Empowering the Nation via 4IR

www.ftsm.ukm.my/mcait2018

1st - 3rd NOVEMBER 2018

**IMPERIAL HOTEL KUCHING
SARAWAK, MALAYSIA**

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The 4th International Multi-Conference on Artificial Intelligence Technology (M-CAIT 2018)

WELCOME MESSAGE

Preface Welcome Message from the MCAIT Conference Chair

On behalf of the M-CAIT 2018 organizing committee, I am delighted to welcome all the delegates and their guests to Kuching, Sarawak, Malaysia for the 4rd International Multi-Conference on Artificial Intelligence Technology (M-CAIT 2018) that will take place from November 1st until 3rd, 2018. This is the Center for Artificial Intelligence Technology's largest annual event devoted to the Artificial Intelligence Technology, and it will give participants a platform to exchange ideas, discover novel opportunities, reacquaint with colleagues, meet new friends, and broaden their knowledge. The conference will be held at the Imperial Hotel, Kuching, Sarawak, which is a spectacular, and feature the unique location, culture and beautiful geography in East Malaysia.

The theme of the M-CAIT 2018 Conference is "Empowering the Nation Via 4IR"; it will broadly cover all disciplines of Artificial Intelligence from fundamental research to applications.

"The Fourth Industrial Revolution, finally, will change not only what we do but also who we are. It will affect our identity and all the issues associated with it: our sense of privacy, our notions of ownership, our consumption patterns, the time we devote to work and leisure, and how we develop our careers, cultivate our skills, meet people, and nurture relationships."

— Klaus Schwab, The Fourth Industrial Revolution

Here, we, as a person, citizen, employee, investor, and social influencer, are critical stakeholders in the Fourth Industrial Revolution. Sharing our thoughts on the technologies and what you value as this revolution unfolds is essential. The world we create through technologies can shape our lives and is the one we pass on to the next generation.

The M-CAIT 2018 was initiated to promote the scientific exchanges and collaborations of Artificial Intelligence researchers in the Asia-Pacific Region, and it also welcomes participation from the other regions of the world. The forth MCAIT 2018 follows the previous editions, M-CAIT 2011 in Putrajaya, M-CAIT 2013 in Shah Alam and M-CAIT 2016 in Malacca, Malaysia. For the M-CAIT 2018, I invite you to take advantage of the technical program and meanwhile experience the culture one of the state in East Malaysia city Kuching, Sarawak.

By the submission deadline of June 30, 2018, the program committee received 114 over full submissions. Each paper received at least two reviews, and most papers each received three reviews. Based on reviews, the program committee accepted 88 papers for oral presentations and 10 posters presentation. All accepted papers and presented at M-CAIT2018 will be publish in one of the journal after intense review.

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1. Journal of Information and Communication Technology (indexed by Scopus)
2. International Journal on Advanced Science, Engineering and Information Technology (indexed by Scopus)
3. Journal of Language Studies (indexed by Scopus)
4. Asia-Pacific Journal of Information Technology and Multimedia (indexed by MyCite)

We have 5 keynotes speaker who will share their knowledge with us during this conference. We are pleased to have PROF. DR. MOHD AIZAINI MAAROF from University Teknologi Malaysia with speech title "CYBER THREAT INTELLIGENCE AT THE AGE OF BIG DATA & IOT", ASSOC. PROF. DR. CHAN CHEE SENG from University of Malaya with his speech "DEEP LEARNING FOR IMAGES", MR. ALBAN SEAH from Wiki Labs Sdn Bhd, CEO th title is "TECHNOLOGY PLATFORM OF THE FUTURE" and the last our keynote is MR. KHAIRUDDIN YAHAYA from MAMPU with a title of his speech is "ARTIFICIAL INTELLIGENCE TECHNOLOGY IN PUBLIC SECTOR" and also Prof Emeritus Dr Abdul Razak Hamdan from CAIT, FTSM, with a title "Comtemplate till dhikr".

I would like to thank all the authors for submitting their papers to M-CAIT 2018, Universiti Kebangsaan Malaysia, Dean of Faculty of Information Science and Technology, the program committee members and reviewers for reviewing the papers. Without their efforts, the M-CAIT 2016 could not have taken place. I thank the workshop committee members for organizing two days' parallel session workshops. I am also grateful to the local arrangements team for their diligent efforts in arranging the logistics. I hope all the delegates spend a pleasant time in Kuching, Sarawak, and find the M-CAIT 2018 a fruitful event.

Assoc. Prof. Dr. Shahnorbanum Sahran,
Center for Artificial Intelligence Technology
Faculty of Information Science and Technology
Universiti Kebangsaan Malaysia

The 4th International Multi-Conference on Artificial Intelligence Technology (M-CAIT 2018)

KEYNOTE SPEAKER



PROF. DR. MOHD AIZAINI MAAROF

University Teknologi Malaysia

***"CYBER THREAT INTELLIGENCE AT THE AGE OF
BIG DATA & IOT"***



ASSOC. PROF. DR. CHAN CHEE SENG

University of Malaya

"DEEP LEARNING FOR IMAGES"



MR. ALBAN SEAH

Wiki Labs Sdn Bhd, CEO

"TECHNOLOGY PLATFORM OF THE FUTURE"



MR. KHAIRUDDIN YAHAYA

MAMPU

***"ARTIFICIAL INTELLIGENCE TECHNOLOGY IN
PUBLIC SECTOR"***



PROF. EMERITUS DR. ABDUL RAZAK HAMDAN

CAIT, FTSM

"DATA SCIENCE: CONTEMPLATE TILL DHIKR"

The 4th International Multi-Conference on Artificial Intelligence Technology (M-CAIT 2018)

MCAIT CONFERENCE 2018 SCHEDULE

(Day 1-Day 3)

1st November 2018 (Day 1) THURSDAY

0730-1015	Opening Ceremony & Keynote I	Grand Ballroom
1015-1030	Tea break (foyer)	
1030-1230	Keynote II, Keynote III, and Keynote IV	
1230-1330	Lunch	
1330-1600	Parallel Sessions	Danum 2 Danum 3 Danum 4 Danum 9
	MOSCMY Workshop: Hybrid Mobile Application Development for Research	Danum 5
	Cyber Resilience Workshop: Deep Learning with Openvino	Danum 8
1600	River Cruise Trip	

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MCAIT CONFERENCE 2018 SCHEDULE

(Day 1-Day 3)

2nd November 2018 (Day 2) FRIDAY

0800-1045	Parallel Sessions	Danum 2 Danum 3 Danum 4 Danum 9
0800-0930	MOSCMY Workshop: Security as Service Platform for IR 4.0	Danum 5
	Cyber Resilience Workshop: Pentesting	Danum 8
0930-1045	MOSCMY Workshop: Using Big Data Tools for Small Data	Danum 5
1045-1145	Keynote V	Grand Ballroom
1145	Lunch	
1400-1700	Conference Workshops	Danum 2 Danum 3 Danum 9
	App Inventor	
	Business-IT Allignment	
	Digital Pathology	
1345-1545	Cyber Resilience Workshop: Fintech Security	Danum 8
1545-1745	Cyber Resilience Workshop: Intrusion and Detection Intelligence	Danum 8

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MCAIT CONFERENCE 2018 SCHEDULE

(Day 1-Day 3)

3rd November 2018 (Day 3) SATURDAY

0900-1230	Conference Workshops Augmented Reality with UNITY From Epistemology to Research Design Semantic Technology Public Sector Analytic Application of Predictive Analytic Using TensorFlow In Healthcare Setting	Danum 2 Danum 3 Danum 4 Danum 5 Danum 8
1230-1400	Lunch	
1400-1700	Conference Workshops (cont)	

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The 4th International Multi-Conference on Artificial Intelligence Technology (M-CAIT 2018)**MCAIT CONFERENCE 2018 SCHEDULE****(Day 1)****1st November 2018****Thursday**

0730	Registration & Poster Preparation		
0900	Opening Ceremony <i>Grand Ballroom</i>		
0930	Keynote Address I Prof Dr Mohd Aizaini Maarof (UTM) Cyber Threat Intelligence At Age of Big Data and IOT <i>Grand Ballroom</i>		
1030	Tea Break		
1045	Keynote Address II Mr. Khairuddin Yahya (MAMPU) Teknologi Kecerdasan Buatan (AI) Dalam Sektor Perkhidmatan Awam Di Malaysia <i>Grand Ballroom</i>		
1115	Keynote Address III Prof Emeritus Dr Abdul Razak Hamdan Data Science: Contemplate Till Dhikr <i>Grand Ballroom</i>		
1200	Keynote Address IV Mr. Alban Seah (Wikilabs) Technology Platform of The Future <i>Grand Ballroom</i>		
1230	Lunch Break		
1330 - 1530	PARALLEL SESSIONS (Danum 2, Danum 3, Danum 4, Danum 9)	Workshop by MOSCMY: Hybrid Mobile App Development for Research (Danum 5)	Cyber Workshop: Deep Learning With Openvino (Danum 8)

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1530 - 1730			Cyber Workshop: Memory Forensics (Danum 8)
1600	END OF SESSION		



The 4th International Multi-Conference on Artificial Intelligence Technology (M-CAIT 2018)**MCAIT CONFERENCE 2018 SCHEDULE****(Day 2)****2nd November 2018****Friday**

0800	PARALLEL SESSIONS (Danum 2, Danum 3, Danum 4, Danum 9)			Workshop By MOSCMY: Security as Service Platform for IR 4.0 (Danum 5)	Cyber Workshop: Pentesting (Danum 8)
0930	POSTER PRESENTATION				
0930	PARALLEL SESSIONS (Danum 2, Danum 3, Danum 4, Danum 9)			Workshop by MOSCMY: Using Big Data Tools for Small Data (Danum 5)	
1045	Keynote V Associate Prof. Dr Chan Chee Seng (UM) Deep Learning for Images <i>Grand Ballroom</i>				
1130	Lunch Break				
1400	App Inventor (Danum 2)	Business-IT Allignment (Danum 3)	Digital Pathology Workshop (Danum 9)	Cyber Workshop: Fintech Security Cyber Workshop: Intrusion & Detection Intelligence (Danum 8)	
1700	Tea Break & Dismiss				

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The 4th International Multi-Conference on Artificial Intelligence Technology (M-CAIT 2018)**MCAIT CONFERENCE 2018 SCHEDULE****(Day 3)****3rd November 2018****Saturday**

0900	Augmented Reality (Danum 2)	From Epistemology to Research Design (Danum 3)	Semantic Technology (Danum 4)	Public Sector Analytics (Danum 5)	Application of Predictive Analytics Using TensorFlow in Healthcare Setting (Danum 8)
1230	Lunch Break				
1400	Augmented Reality (Danum 2)	From Epistemology to Research Design (Danum 3)	Semantic Technology (Danum 4)	Public Sector Analytics (Danum 5)	Application of Predictive Analytics Using TensorFlow in Healthcare Setting (Danum 8)
1700	Tea Break & Dismiss				

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The 4th International Multi-Conference on Artificial Intelligence Technology (M-CAIT 2018)

MCAIT CONFERENCE 2018 SCHEDULE

Opening Ceremony

0730 - 0900	Arrival of Guests Arrival of VIPs
0900 - 0905	Recitation of Du'a
0905 - 0915	Welcoming Speech by Assoc. Prof. Dr. Shahnorbanun Sahran Chairperson of CAIT
0915 - 0930	Cultural Dance



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1ST NOVEMBER 2018 – THURSDAY

VENUE : DANUM 2

Chairperson: Associate Prof. Dr. Mohd Zakree Ahmad Nazri

Time	ID	Time
1330	61	Lexical Scoring System of Lexical Chain for Quranic Document Retrieval <i>Hamed Zakeri Rad, Sabrina Tiun and Saidah Saad</i>
1345	62	Pembangunan Taksonomi dari Teks Melayu Menggunakan Algoritma Kunang-Kunang Pembahagi Dua Sama <i>Mohd Zakree Ahmad Nazri, Tri Basuki Kurniawan, Abdul Razak Hamdan, Salwani Abdullah and Mohammed Azlan Mis</i>
1400	65	Towards Serendipity for Content-Based Recommender Systems <i>Nur Izyan Yasmin Saat, Shahrul Azman Mohd Noah and Masnizah Mohd</i>
1415	71	Hybrid NMT Using Multi-Source Encoder-Decoder LSTM in English-Malay Translation <i>Yin-Lai Yeong, Tien-Ping Tan, Keng Hoon Gan and Siti Khaotijah Mohammad</i>
1430	80	Extracting Relevant Agro Food Keywords from Malaysian Online Newspapers <i>Mohamad Farhan Mohamad Mohsin, Siti Sakira Kamaruddin, Fadzilah Siraj, Hamirul Aini Hambali and Mohammed Ahmed Taiye</i>
1445	82	Features of Islamic Websites, Perceptions of Muslim Users, and Utilization Behavior: A Conceptual Model <i>Mansur Aliyu</i>
1500	54	A Hybrid Water Flow-Like Algorithm and Variable Neighbourhood Search for Traveling Salesman Problem <i>Mohamed Rafique Othman, Zulaiha Ali Othman, Ayman Ibraheem Srouf</i>
1515	68	Enhanced Buffer Management Policy and Packet Prioritization for Wireless Sensor Network <i>Abdiwahab Rabile, Khairul Azmi Abu Bakar and Dahlila Putri Dahnii</i>
1530	44	Image Enhancement Background for High Damage Malay Manuscripts using Adaptive Threshold Binarization <i>Sitti Rachmawati Yahya, Khairuddin Omar and Siti Norul Huda Sheikh Abdullah</i>

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VENUE : DANUM 3

Chairperson: Prof. Dr. Haslina Arshad

Time	ID	Title
1330	28	Leveraging Multimodal Interaction and Adaptive Interfaces for Location-based Augmented Reality Islamic Tourism Application <i>Rimaniza Zainal Abidin, Haslina Arshad, Saidatul A'Isyah Ahmad Shukri and Mah Fui Ling</i>
1345	29	A Review of Multimodal Interaction Technique in Augmented Reality Environment <i>Siti Soleha Muhammad Nizam, Rimaniza Zainal Abidin, Nurhazarifah Che Hashim, Meng Chun Lam, Haslina Arshad and Nazatul Aini Abd Majid</i>
1400	5	Malaysian Universities Websites Evaluation based on Quality in Use Evaluation Model (QinUEM) <i>Nedal Nwasraa, Nurlida Basir and Mohd Fadzli Marhusin</i>
1415	10	An Efficient and Robust Mobile Augmented Reality Application <i>Siok Yee Tan, Haslina Arshad and Azizi Abdullah</i>
1430	46	User Experience Model for Remote Envenomation Consultation Mobile Application with Decision Support Ability <i>Rasyida Zainun, Meng Chun Lam, Khairul Azmi Abu Bakar and Ahmad Khaldun Ismail</i>
1445	43	Kerangka Tadbir Urus Keselamatan Maklumat Sektor Awam di Malaysia <i>Amri Jamil and Zawiyah M. Yusof</i>
1500	20	Mobile User Perception Management System Conceptual Framework for Express Bus Safety Journey in Malaysia <i>Rosilah Hassan, Samreen Salek, Mohammad Khatim Hasan, Meng Chun Lam, Wan Mohd Hirwani Wan Hussain</i>
1515	16	Cloud Based Performance Data Analysis and Monitoring System for Express Bus in Malaysia <i>Rosilah Hassan, Husna Inani Abdul Jabar, Mohammad Khatim Hasan, Meng Chun Lam and Wan Mohd Hirwani Wan Hussain</i>
1530	47	Mobile Augmented Reality (AR) Application Using Phonics in Fostering Literacy for Children with Autism <i>Zainal Mahayuddin and Najmiah Mamat</i>

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VENUE : DANUM 4

Chairperson: Prof. Dr. Salwani Abdullah

Time	ID	Title
1330	27	Machine Learning Approach for Bottom 40 Percent Households (B40) Poverty Classification <i>Mariah Abdul Rahman, Nor Samsiah Sani, Shahnurbanon Sahran, Azuraliza Abu Bakar and Hafiz Mohd Sarim</i>
1345	22	Multiple Objective Memetic Discrete Differential Evolution Algorithm for Solving the Container Pre-marshalling problem <i>Hossam Mustafa, Masri Ayob, Mohd Zakree Ahmad Nazri and Sawsan Abu-Taleb</i>
1400	75	Modified Dynamic Time Warping for Hierarchical Clustering <i>Mahmoud Sammour, Zulaiha Ali Othman and Rosmayati Mohamad</i>
1415	78	Entanglement Classification for a Three-qubit System Using Special Unitary Groups, SU(2) and SU(4) <i>Siti Munirah Mohd, Bahari Idrus, Hishamuddin Zainuddin and Muriati Mukhtar</i>
1430	79	BasKita: A Mobile Based Bus Tracking Framework <i>Siok Yee Tan, Haslina Arshad, Haekal Mozzia Putra, Mohammad Faidzul Nasrudin and Meng Chun Lam</i>
1445	57	Primary and Secondary School Student's Perspective on STEM Module and Robotic Prototype <i>Noor Faridatul Ainun Zainal, Rosseni Din, Nazatul Aini Abd Majid, Abdul Hadi Abd Rahman and Mohamad Faidzul Nasrudin</i>
1500	73	Data raya dalam sistem pendidikan Malaysia: Membongkar kejayaan Sijil Pelajaran Malaysia dari Ujian Aptitud Sekolah Rendah <i>Azhar M. Khairy, Afzan Adam and Mohd Ridzwan Yaakub</i>
1515	23	Dr.LADA App: Diagnosing Black Pepper Pests and Diseases with Decision Tree <i>Afzan Adam, Kho Pei Ee, Noraidah Sahari, Angela Tida, Chen Yi Shang, Kevin Muyang Tawie, Shafinah Kamarudin, Hazura Mohamed</i>
1530	9	Population Initialisation Methods for Fuzzy Job-Shop Scheduling Problems: Issues and Future Trends <i>Syaimak Abdul Shukor, Iman Mousa Shaheed and Salwani Abdullah</i>

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VENUE : DANUM 9

Chairperson: Dr. Salvinder Singh

Time	ID	Title
1330	8	Artificial Neural Network Classification for Fatigue Feature Extraction Parameters Based on Road Surface Response <i>Salvinder Singh, Shahrum Abdullah and Mohd Faridz Mohd Yunoh</i>
1345	56	Breast Tissue Classification via Interval Type 2 Fuzzy Logic Based Rough Set <i>Wan Noor Aziezan Baharuddin, Siti Norul Huda Sheikh Abdullah, Shahnurbanon Sahran, Ashwaq M. S. Qasem, Rizuana Iqbal Hussain, Fuad Ismail and Azizi Abdullah</i>
1400	74	Test Case Minimization Applying Firefly Algorithm <i>Nor Laily Hashim and Yasir Salman Dawood</i>
1415	76	A Comparison of Supervised Learning Techniques for Predicting the Mortality of Patients with Altered State of Consciousness <i>Muthukkaruppan Annamalai</i>
1430	77	General Network-Level Behavioural Malware Predictive Analytics Model based on Bayesian Network <i>Mohammad Hafiz Mohd. Yusof and Mohd Rosmadi Mokhtar</i>
1445	32	Redefining Selection of Features and Classification Algorithms for Room Occupancy Detection <i>Illa Iza Suhana Shamsuddin, Nor Samsiah Sani, Shahnurbanon Sahran and Abdul Hadi Abd Rahman</i>
1500	24	Serious Games for Post-Stroke Rehabilitation Using Microsoft Kinect <i>Azrulhizam Shapii and Haslina Arshad, Mohd Syazwan Baharuddin, Hafiz Mohd Sarim</i>
1515	25	Interactive Games Using Hand-Eye Coordination Method for Autistic Children Therapy <i>Azrulhizam Shapii and Noor Atifah Abd Rahman, Mohd Syazwan Baharuddin, Mohd Ridzwan Yaakub</i>
1530	59	A Community-Based Method to Detect Personal Life Events in Online Social Networks <i>Amin Mahmoudi, Mohd Ridzwan Yaakub and Azuraliza Abu Bakar</i>

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VENUE : DANUM 2

Chairperson: Dr Adnan Shahid Khan

Time	ID	Title
0800	13	Malay POS Tagging for Social Media Texts <i>Siti Noor Allia Noor Ariffin and Sabrina Tiun</i>
0815	33	A Survey on Mental Health Detection in Online Social Network <i>Rohizah Abd Rahman, Khairuddin Omar, Shahrul Azman Mohd Noah and Mohd Shahrul Nizam Mohd Danuri</i>
0830	36	Building Compact Entity Embeddings Using Wikidata <i>Mohamed Lubani and Shahrul Azman Noah</i>
0845	52	Question Classification Based on Bloom's Taxonomy Using Enhanced TF-IDF <i>Manal Mohammed, Nazlia Omar</i>
0900	58	Classification of Encouragement (Targhib) And Warning (Tarhib) Using Sentiment Analysis on Classical Arabic <i>Hatem Alhasani and Saidah Saad</i>
0915	60	The Effectiveness of Bottom Up Technique with Probabilistic Approach for A Malay Parser <i>Muhammad Azhar Fairuzz Hiloh, Mohd Juzaidin Ab Aziz and Lailatul Qadri Zakaria</i>
0930	POSTER PRESENTATION	
1000		
1015		
1030		
1045	KEYNOTE	

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VENUE : DANUM 3

Chairperson: Associate Prof. Dr. Mohd Khatim Hasan

Time	ID	Title
0800	3	Semi Non-Standard Trimean Algorithm for Rosenzweig-MacArthur Interaction Model <i>Mohammad Khatim Hasan, Noor Ashikin Othman, Samsul Ariffin Abdul Karim and Jumat Sulaiman</i>
0815	4	Interpolation Using Cubic Bézier Triangular Patches <i>Samsul Ariffin Abdul Karim, Azizan Saaban, Mohammad Khatim Hasan, Jumat Sulaiman and Ishak Hashim</i>
0830	34	The Effectiveness & Efficiency of eAedes Framework Based on GIS <i>Muhammad Ilham and Ibrahim Mohamed</i>
0845	39	Wi-Fi Indoor Positioning Fingerprint Health Analysis for a Large Scale Deployment <i>Kwok Shien Yeo, Alvin Ting Kee Ngoh, Seh Chun Ng, David Chieng Heng Tze and Nuzli Mohamad Anas</i>
0900	40	Usability of ReSt Module Using Four-Steps Approach Based on Case Study Example and Infographic for SPSS Novice <i>Azura Ishak, Rosseni Din and Hazura Mohamed</i>
0915	17	Augmented Reality to Promote Guided Discovery Learning for Periodic Table <i>Nurfaizah Abd Majid and Nazatul Aini Abd Majid</i>
0930	POSTER PRESENTATION	
1000		Heterogeneous Ensemble Pruning based on Bee Algorithm for mammogram classification <i>Ashwaq Qasem, Site Norul Huda Sheikh Abdullah, Shahnorbanun Sahran, Dheeb Albashish, Rizuana Iqbal Hussain, and Shantini Arasaratnam</i>
1015	48	Blockchain Technology the Identity Management and Authentication Service Disruptor: A Survey <i>Shu Yun Lim, Pascal Tankam Fotsing, Abdullah Almasri, Miss Laiha Mat Kiah, Tan Fong Ang, Reza Ismail and Omar Musa</i>
1030		
1045	KEYNOTE	

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VENUE : DANUM 4

Chairperson: Associate Prof. Dr. Zalinda Othman

Time	ID	Title
0800	2	Knowledge Base of Expert System to Diagnose Eye Diseases Using FP-Growth Association Rules <i>Rahmad Kurniawan, Mohd Zakree Ahmad Nazri, Siti Norul Huda Sheikh Abdullah, Jemaima Che Hamzah and Westi Oktaviana</i>
0815	6	Feature selection from colon cancer dataset for cancer classification using Artificial Neural Network <i>Md. Akizur Rahman and Ravie Chandren Muniyandi</i>
0830	15	Modified Self-Adaptive Harmony Search (MSAHS) for Local Search Mechanism <i>Farah Aqilah Bohani, Siti Norul Huda Sheikh Abdullah and Khairuddin Omar</i>
0845	19	Ant Colony Optimization Based Subset Feature Selection in Speech Processing Applications: An Overview <i>Rajesvary Rajoo and Rosalina Abdul Salam</i>
0900	37	Classification Techniques for Predicting UKM Graduate Employability <i>Zalinda Othman, Soo Wui Shan, Ishak Yusoff and Chang Peng Kee</i>
0915	26	A Proposed Bi-layer Crime Prevention Framework using Big Data Analytics <i>Shu Wei Tao, Ooi Chong Yang, Mohamed Sahil bin Mohamed Salim, Wahidah Husain</i>
0930	POSTER PRESENTATION	
1000		Linear Intensity-Based for Image Registration <i>Yasmin Mumtaz Ahmad, Shahnorbanun Sahran, Afzan Adam, Syazarina Sharis Osman</i>
1015		Lightweight and Optimized Multi-Layer Data Hiding Using Video Steganography <i>Samar Kamil, Masri Ayob, Siti Norul Huda Sheikh Abdullah, Zulkifli Ahmad</i>
1030		Robot Arm Analysis Based On Master Device Pneumatic Actuators <i>Mohd Aliff Afira, Nor Samsiah Sani</i>
1045	KEYNOTE	

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VENUE :DANUM 9

Chairperson: Prof. Dr. Masri Ayob

Time	ID	Title
0800	7	A Survey on Malware Analysis Techniques: Static, Dynamic, Hybrid and Memory Analysis <i>Rami Sihwail, Khairuddin Omar and Khairul Akram Ariffin</i>
0815	14	Gait Recognition based on Inverse Fast Fourier Transform Gaussian and Enhancement Histogram Oriented of Gradient <i>Siti Zaharah Abd. Rahman, Siti Norul Huda Sheikh Abdullah and Khairul Akram Zainol Ariffin</i>
0830	18	High Quality Wavelets Features Extraction for Handwritten Arabic Numerals Recognition <i>Muhammad Suhail Akhtar, Hammad Qureshi, Mafawez Alharbi and Hani Alquhayz</i>
0845	49	Multiple Descriptors for Visual Odometry Trajectory Estimation <i>Mohammed Salameh, Azizi Abdullah and Shahnorbanun Sahran</i>
0900	50	Multi-Classifer Jawi Handwritten Sub-Word Recognition <i>Anton Heryanto Hasan, Khairuddin Omar and Muhammad Faidzul Nasrudin</i>
0915	67	Automatic Detection Of Shadda In Modern Standard Arabic Continuous Speech <i>Ammar Alsabri, Afzan Adam and Fadhilah Rosdi</i>
0930	POSTER PRESENTATION	
1000	38	A Concavity Point Analysis and Skeleton Algorithm for Detection and Quantization in Heavily Clump of Red Blood Cells <i>Izyani Ahmad, Siti Norul Huda Sheikh Abdullah and Raja Zahratul Azma Raja Shabudin</i>
1015	45	Reading with Robots: A Personalized Robot-Based Learning Companion for Solving Cognitively Demanding Tasks <i>Azizi Ab Aziz and Hayder Mohammed</i>
1030		Morphological features analysis for erythrocyte classification in IDA and Thalassemia <i>Izyani Ahmad, Siti Norul Huda Sheikh Abdullah, Raja Zahratul Azma Raja Sabudin</i>
1045	KEYNOTE	

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POSTER PRESENTATION

	ID	Title
1	31	Sentiment Analysis: An Enhancement Of Ontological-Based Using Hybrid Machine Learning Techniques <i>Mohd Ridzwan Yaakub And Muhammad Iqbal Abu Latiffi</i>
2	69	English Language Teachers' Readiness For The Application Of Technology Towards Fourth Industrial Revolution Demands <i>Norizan Abdul Razak, Hussien Alakrash And Yasmin Sahboun</i>
3	70	Pedagogical Issues Of Using Ict Applications In Iraq <i>Norizan Abdul Razak And Halah Kamal Saeed</i>
4	72	Classification Models For Higher Learning Scholarship Award Decisions <i>Wirawati Dewi Ahmad And Azuraliza Abu Bakar</i>
5	35	Analysis And Extraction Of Concept And Concept Relation For Islamic Term Using Syntactic Pattern Approach And Rules <i>Ummu Kalsom Latiff And Saidah Saad</i>
6	42	Aspect-Based Sentiment Analysis Methods In Recent Years <i>Zohreh Madhoushi, Abdul Razak Hamdan And Suhaila Zainudin</i>
7	51	Optimal Feature Selection Method Based On Information Gain And Domain Specific Ontology <i>Ibrahim Said Ahmad, Mohd Ridzwan Yaakub And Azuraliza Abu Bakar</i>
8	83	A Risk Management Approach To The Development Of An Early Warning System: A Case For Tasik Chini <i>Siti Narimah Jamali And Mohamad Shanudin Zakaria</i>




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