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INTELLIGENT CONTROL & AUTOMATION SYMPOSIUM

PROGRAM BOOK

27 NOVEMBER 2018
UTM JOHOR BAHRU

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**INTELLIGENT, CONTROL AND
AUTOMATION
SYMPOSIUM 2018**

ICAS 2018

Table of Content

Item	Page
Organizing Committee	1
Welcome Note by ICAS 2018 Chairman	2
Program Table	3
Parallel Sessions	4
Acknowledgment	8

ICAS 2018 ORGANIZING COMMITTEE

Patron	Professor Dr. Mohd Hasbullah bin Hj. Idris, <i>Chair, School of Mechanical Engineering, UTM</i> Professor Ir. Dr Mohd. Wazir bin Mustafa <i>Chair, School of Electrical Engineering, UTM</i>
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Assistant Chairman	Dr. Shafishuhaza binti Sahlan, <i>UTM</i>
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Secretary	Dr. Nur Safwati binti Mohd Nor, <i>UTM</i> Dr. Maziah binti Mohamad, <i>UTM</i>
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Technical Committee	Associate Professor Ir. Dr. Zarhamdy bin Mohd Zain (Head), <i>UTM</i> Dr. Mohd Sazli bin Saad, <i>UTM</i> Dr. Tan Howe Hing, <i>UTM</i> Dr. Muhamad Sukri bin Hadi, <i>UiTM</i> Dr. Annisa binti Jamali, <i>UNIMAS</i> Dr. Mohd Zakimi Zakaria, <i>UniMAP</i>
Conference Proceeding/ Program Book	Dr. Jaysuman bin Pusppanathan, <i>UTM</i> Dr. Hanim bin Mohd Yatim, <i>UTM</i> Puan Siti Norulhana binti Hj. Miskan, <i>UTM</i>
Program/ Local Arrangement	Dr. Kamarulafizam bin Ismail, <i>UTM</i> Dr. Mat Hussin bin Ab. Talib, <i>UTM</i>

WELCOME NOTE FROM CHAIRMAN OF ICAS 2018



Welcome the first Intelligent Control and Automation Symposium, ICAS 2018.

As the Chairman of the organizing committee of ICAS 2018, I would like to cordially invite all interested researchers and practitioners from academia and industry to attend and/or present at this symposium. ICAS 2018 will provide an excellent platform for knowledge-sharing and research activities in intelligent control and automation. Available topics in IACS 2018 include artificial intelligent, control, automation, instrumentation, robotic, modelling and simulation, system identification, system engineering, metaheuristic optimization, soft computing as well as other related topics. The aim of this symposium is to bring together researchers, build a research connection, exchange of new ideas and establishing new collaboration in the participated areas.

The symposium will be held on 27th November 2018 at the School of Mechanical Engineering, Faculty of Engineering, Universiti Teknologi Malaysia, Johor Bahru, Johor. On that day, plenary and keynote presentations as well as parallel session will be conducted. For your information, papers submitted to the ICAS 2018 have been peer-reviewed by a minimum of two reviewers. All accepted and presented papers will be published in ICAS 2018 Online Proceedings and selected papers will be considered for Scopus indexed journal publication.

I hope you all will have a good deliberation during the symposium and wish you all success in your research. I am looking forward for your presentation in ICAS 2018.

Best wishes,

Associate Prof. Dr. Intan Zaurah Mat Darus

Conference Chairman ICAS 2018

INTELLIGENT CONTROL AND AUTOMATION SYMPOSIUM

ICAS 2018 PROGRAM TABLE

8:30 am - 9:00 am	Registration
9:00 am - 10:00 am	Opening Ceremony from Chair of Schools Welcoming Remark from Chairman ICAS Best Paper Award Presentation Group Photo Session
10:00 am - 10:45 am	Morning Break
10:45 am - 1:00 pm	Parallel Session 1 Seminal Hall (<i>SH</i>) Parallel Session 2 Lecture Hall 1 (<i>LH1</i>) Parallel Session 3 Lecture Hall 2 (<i>LH2</i>) Parallel Session 4 CDIO Room (<i>CR</i>)
1:00 pm - 2:00 pm	Lunch Break End

ICAS 2018 PARALLEL SESSIONS

Seminar Hall, C23, School of Mechanical Engineering, UTM

ID	TITLE	AUTHORS/ AFFILIATION	SESSION
2	Modelling And Simulation Of Electronic Wedge Brake-based Antilock Brake System	Mohd Hanif Che Hasan, <i>UTeM</i> , Mohd Khair bin Hassan, <i>UPM</i> , Fauzin bin Ahmad, <i>UTeM</i>	10:45am-11:00am
7	Wiper Simulation Using Input Shaping To Reduce The Effects Of Noise And Vibration	Ismasyariff Bin Salleh, <i>UTM</i> , Mohd Zarhamdy bin Mohd Zain, <i>UTM</i> , Abdul Rahim bin Abu Bakar, <i>UTM</i>	11:00am – 11:15am
13	Durability Analysis For Automobile Suspension Using Equivalent Damage-Modelling	Reza Manouchehry Nya, <i>UKM</i> , Shahrul bin Abdullah, <i>UKM</i> , Salvinder Singh Karam Singh, <i>UKM</i>	11:15am – 11:30am
15	Durability Assessment For Random Load Signal Of Automobile Suspension Spring Force Using Multibody Dynamics	C. H. Chin, <i>UKM</i> , S. Abdullah, <i>UKM</i> , Salvinder Singh Karam Singh, <i>UKM</i> , D. Schramm, <i>Duisburg Germany</i> , A. K. Ariffin, <i>UKM</i> , A.A.A. Rahim, <i>UKM</i> .	11:30am – 11:45am
16	Dynamic Model Of Flexible Beam System Using Firefly Algorithm	Noor Fadhilah Mat Ros, <i>UniMAP</i> , Mohd Sazli bin Saad, <i>UniMAP</i> , Mohd Zakimi bin Zakaria, <i>UniMAP</i> , Intan Zaurah binti Mat Darus, <i>UTM</i> .	11:45am – 12:00pm
17	Dynamic Model Of Flexible Beam System Using Bat Algorithm Approach	Noor Fadhilah Mat Ros, <i>UniMAP</i> , Mohd Sazli bin Saad, <i>UniMAP</i> , Mohd Zakimi bin Zakaria, <i>UniMAP</i> , Intan Zaurah binti Mat Darus, <i>UTM</i> .	12:00pm – 12:15pm
22	Implementation Of Evolutionary Algorithm In Modelling The Gradient Flexible Plate Structure	Muhammad Hasbollah bin Hassan, <i>UNIMAS</i> , Annisa Jamali, Lidyana, <i>UNIMAS</i> , Intan Zaurah binti Mat Darus, <i>UTM</i> .	12:15pm – 12:30pm
24	Semi-Active Suspension System Using Mr Damper With Particle Swarm Optimization – Skyhook Controller	Ahmad Hafizal Mohd Yamin, <i>UTM</i> , Intan Zaurah binti Mat Darus, <i>UTM</i> , Nur Safwati binti Mohd Noor, <i>UTM</i>	12:30pm – 1:00pm

*10 minutes Presentation & 5 minutes Q&A

Lecture Hall 1, C23, School of Mechanical Engineering, UTM

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Lecture Hall 2, C23, School of Mechanical Engineering, UTM

ID	TITLE	AUTHORS/ AFFILIATION	SESSION
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CDIO Room, C25, School of Mechanical Engineering, UTM

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