

ICSE 2015 - DAY 1 Tuesday 08/09/2015

09:00-10:00	Coffee/Tea - Registration	
10:00 - 10:20	Opening Ceremony	
10:20 - 11:20	Plenary talk I Dr Silvio Simani Department of Engineering, University of Ferrara, Italy Advanced Issues of Wind Turbine Modelling and Control	
11:20 - 11:50	Coffee/Tea	
Parallel Sessions 11:55 - 12:45	Paper Session 1 – Control Theory I	
	Geometric nonlinear of the control moment gyroscope inverted pendulum	Yawo Amengonu , Yogendra Kakad, Eziani Adake
	A model order reduction technique for bilinearised nonlinear models	Oluwaleke Agbaje, Malgorzata Sumislawska, Keith Burnham
	Paper Session 2 – Heating/Air Conditioning Systems	
	Energy efficient control solutions for HVAC systems	Aleksandra Oswiecimska, Jason Hibbs, Ivan Zajic, Keith Burnham
	Application and Comparison of Temperature Control Strategies to a Heating Element Model	Cihan Turhan, Silvio Simani, Ivan Zajic, Gulden Gokcen
12:45 - 13:50	Lunch	
Parallel Sessions 13:50 - 15:30	Paper Session 3 – Robotic Systems	
	A Method of Identifying and Adapting to Rigidly Grasped Loads for Space Robots	Douglas Isenberg
	Review of Autonomous Navigation for Indoor Aerial Robots within a Nuclear Decommissioning Context	Thomas Burrell, Stephen D. Monk, Allahyar Montazeri, C. James Taylor
	Nonholonomic Kinematic Optimal Control of Wheeled Mobile Robots	Yawo Amengonu, Yogendra Kakad, Eziani Adake
	Detection and Implementation Autonomous Target Tracking with a Quadrotor AR.Drone	Kamel Boudjit
	Paper Session 4 – Fault Tolerant Systems	
Fault-Tolerant Control of Offshore Wind Farm Installations via Adaptive Nonlinear Filters	Silvio Simani , Saverio Farsoni, Paolo Castaldi,	

	Coupling Shaft Condition Monitoring System Using Recursive Identification Algorithms	Ioannis Souflas, Antonios Pezouvanis, Kambiz Ebrahimi
	Optimised sensor placement strategies to reduce False Alarms in avionic units	Samir Khan
	Design of a fault isolation observer for a fuel cell stack system	Malgorzata Sumislawska
15:30 - 15:50	Coffee/Tea	
Parallel Sessions 15:50- 17:05	Paper Session 5 – Drilling Tool Control	
	Control of a Rotary Steerable System Directional Drilling Tool Roll-Stabilised Control Unit	Hamid Alturbeh, James Whidborne, Patick Luk, Martin Bayliss
	Stick-Slip Control and Optimization of Rate of Penetration in Directional Drilling	Ita Bassej , Olivier Haas
	Application of LQG Control to Attitude Control of Directional Drilling	Martin Bayliss , Isonguyo Inyang, James Whidborne
	Paper Session 6 – Signal Processing and Applications	
	An Optimal Discrete-Time Signal Processing in a Time Domain	Oleksii Sergeev-Horchynskyi
	Dualization Methods for Obstacle-Avoidance in Path Planning	Rushen Patel , Paul Goulart, Arthur Richards
	An approach to drift removal from MARG-based estimated velocity	Krzysztof Brzostowski
18:00 - 22:00	Evening reception – Whitefriars	

ICSE 2015 - DAY 2 Wednesday 09/09/2015

09:00 - 09:30	Coffee/Tea - Registration	
09:30 - 10:30	<p>Plenary talk II</p> <p>Prof Allen Stubberud</p> <p>Department of Electrical Engineering and Computer Science, University of California, Irvine, USA</p> <p>My Career Path-Power to Circuits to Analogue Computers to Control to Estimation</p>	
Parallel Sessions 10:35- 11:25	Paper Session 7 – Control Theory II	
	Estimation For Target Tracking Using A Control Theoretic Approach – Part 3	Stephen Stubberud, Kathleen Kramer, Arthur Teranishi
	A Dynamic System Matching Technique - A State Space Formulation	Peter Stubberud, Stephen C. Stubberud, Allen R. Stubberud,
	Paper Session 8 – Evolutionary Algorithms	
	Evolutionary algorithm for minmax regret flow-shop problem	Michał Ćwik, Jerzy Jozefczyk
	Comparative Performance of Genetic Algorithm, Simulated Annealing and Ant Colony Optimisation in solving the Job-shop Scheduling Problem	Zhonghua Shen, Leonid Smalov
11:25 -11:45	Coffee/Tea	
Parallel Sessions 11:45-13:25	Paper Session 9 – PICASSOS Research Project	
	Overview of the PICASSOS Research Project	John Botham
	Translation from SysML to Simulink/Stateflow	Vijay Pasupuleti , Gunwant Dhadyalla
	Measurement and Assessment for Automotive Improvement	Antony Powell , John Murdoch
	The PICASSOS Research Project Summary	John Botham
	Paper Session 10 – Transportation Systems	
Challenges facing the development of autonomous vehicles	Alex Gilbert	

	Development of an advanced fuel consumption management system to optimize electrical energy using fuzzy logic control technique	Alkiviadis Boulos, Keith Burnham
	Implementing aftermarket Controller Area Network-based diagnostics with inexpensive tools	Vincent Ersanilli
	Seamless Interchangeability – New Rail Concept	Keith Burnham, James Trollope, Mateusz Borowski, Rafal Machon
13:25 - 14:30	Lunch	
14:30 - 15:30	Plenary talk III Dr Phil Barber Vehicle Capability Research, Jaguar and Land Rover Research, Coventry, UK Control Systems of Driven Vehicles	
15:30 - 15:50	Coffee/Tea	
Parallel Sessions 15:50 - 17:05	Discussion Session 11 – Automotive Systems	
	To be confirmed	
	To be confirmed	
	To be confirmed	
	Discussion Session 12 – Mixed Topics	
	Control and Measurement of Low Flow and Medical Devices	Douglas Clarkson
	Control of Railway Systems	Keith Burnham
	Horizon 2020 Challenges/Opportunities	To be confirmed
17:15-17:30	Group photo	
19:00 - 23:00	Conference Dinner – Britannia Hotel	

ICSE 2015 - DAY 3 Thursday 10/09/2015

09:00-09:30	Coffee/Tea - Registration	
Parallel Sessions 09:30 – 11:10	Paper Session 13 – Control Theory III	
	PI Regulation Control of a Fluid Flow Model Governed by Hyperbolic Partial Differential Equations	Ngoc Tu Trinh , Vincent Andrieu, Cheng-Zhong Xu
	Review of model order reduction techniques for linear and nonlinear systems	Toheed Aizad, Malgorzata Sumislawska, Keith Burnham
	Estimation of Continuous-time Fractional Order Nonlinear Models	Walid Allafi, Ivan Zajic
	Stability of neutral systems with infinite delays	Iyai Davies , Olivier Haas
	Paper Session 14 – Adaptive Systems	
	Admissibility Analysis of Singular Time-delay Systems via Delta Operator Approach	Yukang Cui, Zhiguang Feng
	Review of a model free adaptive extremum seeking control for maximum point tracking	Othman George Maganga, Malgorzata Sumislawska , Keith Burnham
	Nonlinear control of industrial systems via pole assignment assignment	Zankhana Thakar
	Developing a Parallel Simulation Model for Improving Manufacturing System Performance	Ahmed Allaith, Ammar Albazi
11:10 - 11:30	Coffee/Tea	
Parallel Sessions 11:30 - 13:10	Paper Session 15 – Automotive Systems	
	Survey of semi-automatic transmission gear ratio and shift map strategies	Adama Fofana , Vincent Ersanilli, Olivier Haas, Keith Burnham
	Modelling Autonomous Vehicle Overtaking Manuever with SCADE	Olivier Haas
	Data driven approaches for remaining useful life estimation of bearings	Navneesh Phillip, Malgorzata Sumislawska
	Battery State Detection	Ivan Zajic
	Paper Session 16 – Control Applications	
	Research and Teaching using a Hydraulically-Actuated Nuclear Decommissioning Robot	Craig West, Thomas Burrell, Allahyar Montazeri, Stephen Monk, C. James Taylor
	Approaches for Estimating Cluster Population	Laxmi Gewali, Sanjeev KC, and Henry Selvaraj

	Risk Management Process Model for Dynamic Global Production Networks	Ali Niknejad, Dobrila Petrovic
	Discretization of Single-Input-Single-Output Bilinear Systems with Equivalent Poles Loci Technique	Lukasz Gadek
13:10	Lunch & Conference Close	
14:00	Farewell Party - Whitefriars	