

# AUCC 2015 PhD/MPhil Student Workshop

Wednesday 04 November 2015  
Watermark Hotel & Spa, Gold Coast  
Atlantis 3

## Workshop Convenors:

Associate Professor and Reader Ying Tan, the University of Melbourne  
Professor Minyue Fu, the University of Newcastle

### 07:30 – 08:00 Workshop Registration & Refreshments

Time	Presenter	Topic
08:00 – 08:15	Gerrad Duffy, Griffith University	Online Process Dynamic Deadtime Estimation Artificial Disturbance Detection
08:15 – 08:30	Shohana Deeba, the University of Queensland	Developing Control Strategies for Battery Management Systems in Electricity Distribution Network
08:30 – 08:45	Zhiyong Sun, the Australian National University	Equilibrium Analysis in Rigid Formation Control System
08:45 – 09:00	Minh Cuong, Deakin University	Observer Design for one Sided Lipschitz Nonlinear System
09:00 – 09:15	Arash Khodaparastsichani, the University of New South Wales, Canberra	Entanglement in Translation Invariant Linear Quantum Stochastic Networks
09:15 – 09:30	Kianoosh Sultani Naveh, the University of Queensland	Geometric Approach for Optimal Control of Serial Chains
09:30 – 09:45	Jonathan Eden, the University of Melbourne	Analysis and Control of Multi-link Cable Driven Manipulators
09:45 – 10:00	Jacek Mocki, Griffith University	Railway Interlocking Process: A Formal Method for Documenting and Evaluating Railway Junction Signalling and Interlocking

### 10:00 – 10:30 Refreshments & Networking

Time	Presenter	Topic
10:30 – 10:45	Seyed Eman Mousavinejad, Griffith University	Advanced Terminal Sliding Mode Control Approach to Integrated Steer-by-Wire and Differential Braking of Ground Vehicles
10:45 – 11:00	Ahmed Jazlan, the University of Western Australia	Frequency Weighted Model Order Reduction for Linear and Bilinear System
11:00 – 11:15	Duc Tran, the University of	Stability Analysis Technique for

	Newcastle	Discrete Time Systems
11:15 – 11:30	Fida Rafi, Griffith University	Zero Dynamic Controller Design for an Unbalanced Microgrid Network
11:30 – 11:45	Muhammad Qamar Raza, the University of Queensland	Short Term Load and PV Forecasting
11:45 – 12:00	Salman Hafeez, the University of Newcastle	Optimal Control of Integrated Assessment Model of Climate Economy
12:00 – 12:15	Gokul Siv a Sankar, the University of Melbourne	Robust Model Predictive Control of Diesel Engine Air Path
12:15 – 12:30	Aymen Ahmed Salih, Griffith University	Intelligent algorithm for controlling irrigation process in multi-crops farms

### 12:30 – 13:30 Lunch & Networking

Time	Presenter	Topic
13:30 – 13:45	Haoquan Liu, the University of Queensland	Optimizing Dragline Operation Sequence in Excavation of a Block
13:45 – 14:00	Shamiur Rahman, Griffith University	Power Management and Control of a Hybrid AC/DC Microgrid Integrated with Renewable Energy Resources and Electric Vehicles
14:00 – 14:15	Anna Skobeleva, the University of New South Wales, Canberra	Source Seeking and Environmental Exploration by Means of Autonomous Mobile Robots
14:15 – 14:30	Foad Taghizadeh, Griffith University	Grid Interconnection of Micro-grid with Smart-transformer with Power-quality Improvement Features
14:30 – 14:45	Khoa Tran, the University of Newcastle	Random sampling for Bayesian Inference in Dynamic Models.
14:45 – 15:00	Fisher Grubb, Griffith University	Hardware in the Loop: Integrating Simulink with the External Embedded Linux Beaglebone Black Processor Board for Programming, Trouble Shooting and Performance Benchmarking
15:00 – 15:15	Amenah Abdulhadi Saleh, Griffith University	Adaptive intelligent algorithm to control traffic light in the path of emergency car in order to optimize the green light period in each traffic light period
END OF THE WORKSHOP		

### 15:30 – 16:00 Refreshments & Networking

NOTE:

You all are cordially invited, regardless whether you are registered for AUCC 2015, to attend the ASES – dSPACE Workshop on “Faster, Better Control Systems Development using dSPACE Systems” which will be held from 16:00 to 18:00 in Atlantis 3 room. The ASES – dSPACE Workshop details can be obtained from <http://www.aucc.org.au/AUCC2015/Workshop2.html>,