



THE UNIVERSITY OF  
MELBOURNE

# #CISDC18

School of Computing and Information Systems  
6th Annual Doctoral Colloquium  
27 September 2018

## Programme



@cis\_dc



fb.me/melbcisdc



CIS-DC@unimelb.edu.au

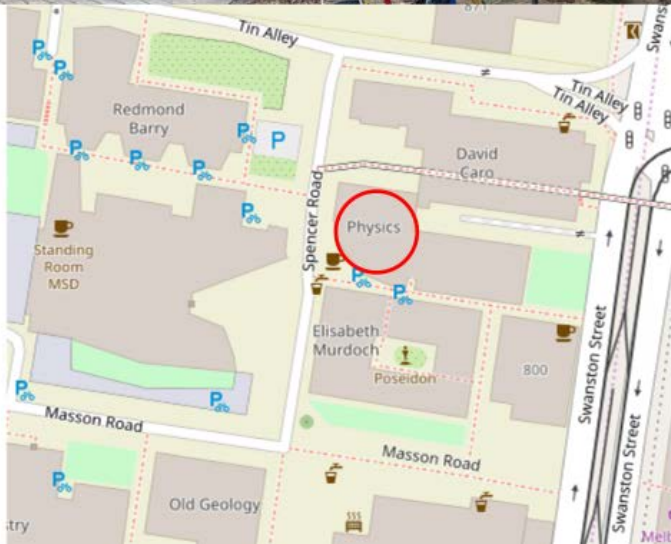


cis.unimelb.edu.au/colloquium

## LOCATION GUIDE

### Physics South Building

Laby Theatre  
Hercus Theatre



### KEYNOTE ADDRESS

*The many potential ways to impact*

**Prof Stan Skafidas**

Managing Director of AMD (Wireless) Australia



# SCHEDULE

09:30–09:45

## Registration

Foyer – Laby Theatre

09:45–10:30

## Welcome and Keynote Address

Laby Theatre

10:30–10:50

## Google Morning Tea Break

Foyer – Laby Theatre

10:50–11:50

### Paper Session 1A

*Data & Knowledge*

**Microsoft Research Centre for  
Social NUI Theatre**  
(Laby Theatre)

### Paper Session 1B

*People & Organisations*

**Amazon Theatre**  
(Hercus Theatre)

11:50–12:05

## CIS-GReS Break

Foyer – Laby Theatre

12:05–13:05

### Paper Session 2A

*Data & Knowledge*

**Microsoft Research Centre for  
Social NUI Theatre**  
(Laby Theatre)

### Paper Session 2B

*People & Organisations*

**Amazon Theatre**  
(Hercus Theatre)

13:05–14:05

## Lunch Break

(Lunch is not provided; Ice cream will be provided from 1:20)

14:05–14:55

## Three-Minute Research Session

Laby Theatre

14:55–15.10

## CIS-GReS Afternoon Tea Break

Foyer – Laby Theatre

15.10–16:30

## Industry Talks

Laby Theatre

16:30–17:30

## Poster Session and Evening Refreshments

Foyer – Laby Theatre

17:30–18:00

## Award Presentations and Closing

Laby Theatre

## SESSION DETAILS

### Paper Session 1A: Data and Knowledge

Microsoft Research Centre for Social NUI Theatre  
(Laby Theatre)

**1. Muhammed Tawfiqul Islam, Satish Narayana Srirama, Shanika Karunasekera and Rajkumar Buyya**

*SLA-aware Scheduling of Big Data Jobs in Heterogeneous Clouds*

**2. Yunxiang Zhao, Jianzhong Qi and Rui Zhang**

*Corner-based Building Height Estimation for Complex Street Scenes*

**3. Estefania Yap, Andres Munoz Acosta and Kate Smith-Miles**

*Instance Spaces for Multi-objective Black-box Optimisation*

**4. Volodymyr Leno**

*Multi-Perspective Process Model Discovery for Robotic Process Automation*

### Paper Session 1B: People and Organisations

Amazon Theatre  
(Hercus Theatre)

**1. Zhanna Sarsenbayeva, Niels van Berkel, Eduardo Velloso, Vassilis Kostakos and Jorge Goncalves**

*Effect of Distinct Ambient Noise Types on Mobile Interaction*

**2. Danula Hettiachchi, Niels van Berkel, Simo Hosio, Miguel Bordallo, Vassilis Kostakos and Jorge Goncalves**

*Crowdsourcing Kinship Verification*

**3. Carlos Andres Agudelo**

*Mobile Device Framework to Address Knowledge Leakage In Organizations*

**4. Ziad Al Bkhetan, Benjamin Goudey and Karin Verspoor**

*Haplotype Estimation, Evaluation and Improvement via Consensus Methods*

## Paper Session 2A: Data and Knowledge

Microsoft Research Centre for Social NUI Theatre  
(Laby Theatre)

**1. Prashan Madumal, Tim Miller, Frank Vetere and Liz Sonenberg**

*Towards an Architecture of Explainable Agency*

**2. Aili Shen**

*A Joint Model for Multimodal Document Quality Assessment*

**3. Tahrira Hashem, Lida Rashidi, Lars Kulik and James Bailey**

*A Personalised Approach for Mining Top-k Groups of Objects with Subspace Similarity*

**4. Namrata Srivastava, James Bailey, Eduardo Velloso, Sarah Erfani and Jason Lodge**

*Estimating Task Difficulty Using Physiological Sensors*

## Paper Session 2B: People and Organisations

Amazon Theatre  
(Hercus Theatre)

**1. Shashikant Ilager, Ramamohanarao Kotagiri and Rajkumar Buyya**

*ETAS: Energy and Thermal-Aware Dynamic Virtual Machine Consolidation in Cloud Data Center with Proactive Hotspot Mitigation*

**2. Tianzhang He, Adel Nadjaran Toosi and Rajkumar Buyya**

*SLA-Aware Live Migration in SDN-NFV-enabled Data Centers*

**3. Minxian Xu**

*Brownout-Oriented Approach for Energy Efficient Cloud Data Centers*

## Three-Minute Research Session

Laby Theatre

**1. David Cumming**

*Social esports spectatorship*

**2. Brian Hur**

*USING NATURAL LANGUAGE PROCESSING AND VETCOMPASS TO UNDERSTAND  
ANTIMICROBIAL USAGE PATTERNS IN AUSTRALIA*

**3. Shraey Bhatia**

*Style Transfer in Text*

**4. Shivashankar Subramanian**

*Political Trust Analysis using Natural Language Processing*

**5. Tabinda Sarwar**

*Understanding the Structural Connectivity of Brain*

**6. Nitika Mathur**

*Panning for the gold standard in Machine Translation evaluation*

**7. Sadaf Afrashteh, Michael Davern and Ida Asadi Someh**

*Explaining to Customers: Towards Ethical Big Data Analytics Services*

**8. Han Liu**

*Expert Finding in Bibliographic Network via Author-Topic-Citation Distribution*

## Industry talks

Laby Theatre

**1. Jürg von Känel (IBM)**

*Now that I have a shiny new degree - what can I do with it?*

**2. (Deloitte)**

*Deloitte industry talk*

**3. Kendra Vant (Seek)**

*Never die wondering – navigating a career that lasts a lifetime*

## Poster Session

**1. Chu Luo**

*Towards Laboratory Testing For Mobile Context-Aware Applications*

**2. Adriano Augusto**

*Interpretable Process Mining*

**3. Peter Eze**

*Medical Image Security using Spread Spectrum Steganography*

**4. Anirudh Joshi, Timothy Baldwin, Richard Sinnott and Cecile Paris**

*Generative Implication using LSTMs, Siamese Networks and Semantic Representations with Synonym Fuzzing*

**5. Abid Hussain Shah, Atif Ahmad and Sean Maynard**

*Embedding Warfare Practices in Cyber Security Management*

**6. Ebrahim Babaei**

*Using Biometric Sensors to Predict Attentional States of Researchers*

**7. Sadegh Motallebi, Egemen Tanin, Jianzhong Qi and Ramamohanarao Kotagiri**

*Route Assignment for Autonomous Vehicle Navigation*

**8. Anam Ahmad Khan, James Bailey and Eduardo Velloso**

*Predicting Note-taking activities to students in learning environment using Bio Sensors*

**9. Subramaniam Ramasubramanian, Atif Ahmad, Sean Maynard and Kevin Desouza**

*Secure Innovations in Organizations*

**10. Daniel Reissner**

*Measuring quality of process models against event logs*

**11. Sadia Nawaz, James Bailey and Gregor Kennedy**

*Are you confused, do you need help?*

**12. Yitong Li**

*Towards Robust and Privacy-preserving Text Representations*

**13. Imairi Eitiveni, Sherah Kurnia and Rajkumar Buyya**

*Understanding how technologies enable organisations to engage in sustainable supply chain management practices*

**14. Jiayuan He, Jianzhong Qi and Kotagiri Ramamohanarao**

*A Jointly Learned Context-Aware Place of Interest Embedding for Trip Recommendations*

**15. Atlarelang Basetsana Kesilwe**

*A time-motion based evaluation of the impact of information systems in an emergency department*

**16. Luthfi Ramadani, Sherah Kurnia and Christoph Breidbach**

*ICT and Sustainable Development Goals (SDGs): Insights from e-Health Initiatives in Indonesia*

**17. Abdullah Aldwyish, Hairuo Xie, Egemen Tanin, Shanika Karunasekera and Ramamohanarao Kotagiri**

*Using a Traffic Simulator for Navigation Service*

**18. Romina Carrasco**

*Older Adults Designing Portrait and Cartoon Avatars for Self-expression*

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