#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
<table>
<thead>
<tr>
<th>Time</th>
<th>Event</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>09:30–09:45</td>
<td>Registration</td>
<td>Foyer – Laby Theatre</td>
</tr>
<tr>
<td>09:45–10:30</td>
<td>Welcome and Keynote Address</td>
<td>Laby Theatre</td>
</tr>
<tr>
<td>10:30–10:50</td>
<td>Google Morning Tea Break</td>
<td>Foyer – Laby Theatre</td>
</tr>
<tr>
<td>10:50–11:50</td>
<td>Paper Session 1A</td>
<td>Microsoft Research Centre for Social NUI Theatre (Laby Theatre)</td>
</tr>
<tr>
<td>10:50–11:50</td>
<td>Paper Session 1B</td>
<td>Amazon Theatre (Hercus Theatre)</td>
</tr>
<tr>
<td>11:50–12:05</td>
<td>CIS-GReS Break</td>
<td>Foyer – Laby Theatre</td>
</tr>
<tr>
<td>12:05–13:05</td>
<td>Paper Session 2A</td>
<td>Microsoft Research Centre for Social NUI Theatre (Laby Theatre)</td>
</tr>
<tr>
<td>12:05–13:05</td>
<td>Paper Session 2B</td>
<td>Amazon Theatre (Hercus Theatre)</td>
</tr>
<tr>
<td>13:05–14:05</td>
<td>Lunch Break</td>
<td>(Lunch is not provided; Ice cream will be provided from 1:20)</td>
</tr>
<tr>
<td>14:05–14:55</td>
<td>Three-Minute Research Session</td>
<td>Laby Theatre</td>
</tr>
<tr>
<td>14:55–15:10</td>
<td>CIS-GReS Afternoon Tea Break</td>
<td>Foyer – Laby Theatre</td>
</tr>
<tr>
<td>15:10–16:30</td>
<td>Industry Talks</td>
<td>Laby Theatre</td>
</tr>
<tr>
<td>16:30–17:30</td>
<td>Poster Session and Evening Refreshments</td>
<td>Foyer – Laby Theatre</td>
</tr>
<tr>
<td>17:30–18:00</td>
<td>Award Presentations and Closing</td>
<td>Laby Theatre</td>
</tr>
</tbody>
</table>
### 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. Tahrima 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 Nadjarian 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 Kesiiwe  
    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