

Second Australian Workshop on Artificial Intelligence in Health (AIH 2012)

PREFACE

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1 Motivation behind the workshop series

The business of health service delivery is a complex one. Employing over 850,000 people, and delivering services to 21.3 million residents, the Australian healthcare system is currently struggling to deal with increasing demand for services, and an acute shortage of skilled professionals. The National e-Health Strategy drives a nationwide agenda to provide the infrastructure and tools required to support the planning, management and delivery of health care services. National initiatives such as the National Health Reform Program, the National Broadband Network, and the Personally Controlled Electronic Health Record are accelerating the use of information and communication technologies in delivering healthcare services. The Australasian Joint Conferences on Artificial Intelligence (AI) provide an excellent opportunity to bring together artificial intelligence researchers who are working in health research.

Driven by a senior program committee comprising distinguished faculty from several Australian universities including Griffith University, the University of New South Wales, University of Newcastle, University of Western Sydney, and Macquarie University, and specialist health research organisations including the CSIRO Australian e-Health Research Centre, the Artificial Intelligence in Health workshop series was created in 2011 to bring these researchers together as part of Australia's premier Artificial Intelligence conference.

2 AIH 2011 – the First Australian Workshop on Artificial Intelligence

Held for the first time in December 2011, the workshop was the first of its kind to bring together scholars and practitioners nationally in the field of Artificial Intelligence driven Health Informatics to present and discuss their research, share their knowledge and experiences, define key research challenges and explore possible collaborations to advance e-Health development nationally and internationally. The workshop was co-located with the 24th Australasian Joint Conference on Artificial Intelligence and was attended by 25 delegates.

Of the 16 submissions received, 6 were accepted as Full Papers and 5 as Short Papers accompanied with posters. All papers presented at the AIH 2011 workshop were also invited to revise and submit their manuscripts for inclusion in a special issue of the Australasian Medical Journal. Of these, seven papers and a letter to the editor were published in the special issue in September 2012.

3 AIH2012 - The Second Australian Workshop on Artificial Intelligence

The Second Australian Workshop on Artificial Intelligence (AIH 2012) is being held in conjunction with the 25th Australasian Joint Conference on Artificial Intelligence (AI 2012) in Sydney, Australia, on the 4th of December, 2012.

The Call for Papers received an excellent response this year. All submitted papers went through a rigorous review process. Of these, 6 full papers and 3 short papers have been accepted for presentation in the workshop and for publication in these CEUR proceedings. The workshop will also feature three keynote addresses and a panel discussion on the topic “AI in Health: the 3 Big Challenges”.

This year again, the workshop is offering 4 travel scholarships of \$250 each to students who were first authors of accepted papers. A best paper prize of \$250 will also be awarded on the workshop day. Both prizes have been sponsored by the CSIRO Australian e-Health Research Centre.

All accepted full papers and short papers will be also invited to extend and reformat their papers for publication in a special issue of the Australasian Medical Journal (www.amj.net.au). The journal is indexed on the following databases: DOAJ, EBSCO, Genamics journalseek, ProQuest, Index Copernicus,

Open J-Gate, Intute, Global health and CAB Abstracts databases, MedWorm, Scopus, Socolar, PMC, PubMed.

4 Workshop Organisation

4.1 Program Chairs

Abdul Sattar (Griffith University, Australia)

David Hansen (CSIRO Australian e-Health Research Centre, Australia)

4.2 Workshop Chair

Sankalp Khanna (CSIRO Australian e-Health Research Centre, Australia)

4.3 Senior Program Committee

Aditya Ghose (University of Newcastle, Australia)

Anthony Maeder (University of Western Sydney, Australia)

Wayne Wobcke (University of New South Wales, Australia)

Mehmet Orgun (Macquarie University, Australia)

Yogesana (Yogi) Kanagasigam (CSIRO Australian e-Health Research Centre, Australia)

4.4 Program Committee

Simon McBride (CSIRO Australian e-Health Research Centre)

Adam Dunn (University of New South Wales)

Stephen Anthony (University of New South Wales)

Lawrence Cavedon (Royal Melbourne Institute of Technology / NICTA)

Diego Mollá Aliod (Macquarie University)

Michael Lawley (CSIRO Australian e-Health Research Centre)

Anthony Nguyen (CSIRO Australian e-Health Research Centre)

Amol Waghlikar (CSIRO Australian e-Health Research Centre)

Bevan Koopman (CSIRO Australian e-Health Research Centre)

Kewen Wang (Griffith University)

Vladimir Estivill-Castro (Griffith University)

John Thornton (Griffith University)

Bela Stantic (Griffith University)

Byeong-Ho Kang (University of Tasmania)
Justin Boyle (CSIRO Australian e-Health Research Centre)
Guido Zuccon (CSIRO Australian e-Health Research Centre)
Hugo Leroux (CSIRO Australian e-Health Research Centre)
Alejandro Metke (CSIRO Australian e-Health Research Centre)

4.5 Key Sponsors

CSIRO Australian e-Health Research Centre
Institute for Integrated and Intelligent Systems, Griffith University

4.6 Supporting Organisations

The Australasian College of Health Informatics
The Australasian Medical Journal
The Australasian Telehealth Society

5 Acknowledgements

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