Special Track on Bioinformatics and Health Informatics (BiHI)

Collocated with the Australasian Database Conference (ADC) 2017

September 25-28, Brisbane, Queensland, Australia

www.uow.edu.au/~jshen/bihi.htm

The Australasian Database Conference series is an annual forum for sharing the latest research progresses and novel applications of database systems, data-driven applications and data analytics for researchers and practitioners in these areas from Australia, New Zealand and in the world. The 28th edition of the Australasian Database Conference, ADC 2017, will be held in Brisbane, Australia. ADC 2017 will be a key event of the 4-day Australasian Database Research Week. In addition to regular research papers, industry papers, demo sessions, plenary poster sessions and a panel session, ADC 2017 will also feature multiple keynote speeches given by world-leading researchers and industry leaders.

This annual conference has become a major technical event in the field of database related research and its application to problems in different disciplines. In 2017, ADC will co-organise a special track focused on bioinformatics and health informatics. With the advances in areas such as big data, machine learning and computational intelligence, bioinformatics becomes a hot multidisciplinary research field bringing academics and industry innovations in biology, computational biology, chemical informatics, bioengineering and related fields. The special track will provide an Australasian forum for academic and industrial researchers around the world who conduct researches in a range of fields including AI, database, biology, medicine, statistics, and chemical engineering, to present their latest research findings from theory to applications.

Topics of interests include but are not limited to:

- Pattern recognition and data mining in bioinformatics and health informatics
- Biomedical and health related data modeling, parametrization and optimisation
- Systems and synthetic biology
- Genomics, proteomics and epigenomics
- MicroRNA analysis, molecular sequence analysis and alignment
- Protein interaction analysis and prediction
- Visualisation of large biological and health related data sets
- Structure prediction, biological network reconstruction
- Pattern recognition in medical imaging
- Deep learning and HPC in bioinformatics and health informatics
- Big data analysis and tools for biological and medical data
- Health data analysis and mining
- Healthcare information systems, HIS knowledge representation and reasoning
- Personalised medicine, precision medicine and treatment optimization

We invite speakers from researchers, practitioners and students in the area of bioinformatics and health informatics worldwide. The special track will be in a half day format with selected speeches and also oral presentations from the papers in the BiHI stream as accepted by the ADC conference.

The special track format will include the following:

- Invited speakers

- Paper presentations

The accepted papers will be published in the proceedings of ADC. The extended abstract of invited speeches will also be included in the proceedings as invited papers. The best papers of this special track may be invited to submit extended versions to a special issue of the journal Health Information Science and Systems (HISS).

Important Dates:

      Research papers:

Abstract Deadline:	June 5, 2017
Full Paper Deadline:	June 12, 2017
Author Notification:	July 10, 2017
Camera-Ready Deadline:	July 21, 2017

      Invited extended abstract (to workshop chairs)

Extended Abstract Deadline: Jun 29, 2017

Author Notification: July 20, 2017

Submission methods:

For Invited speech, please submit your extended abstract (4 pages) and short biography to the workshop chair at jshen@uow.edu.au.

For Research track papers (12 pages), the submission method is the same as ADC, with a special note on the Special Track on Bioinformatics and Health Informatics.

- Submitted papers must be original contributions and cannot be under review for any other forum. The accepted papers will be published in the conference proceedings, which will form a volume in the Springer's Lecture Notes in Computer Science series.
- All submitted papers must be in English and conform to the formatting instructions for the Lecture Notes in Computer Science (LNCS) including references and figures.
- Submitted files must be in PDF, where the following page limits apply: research paper (12 pages), extended abstract for invited speeches (4 pages).
- The format style files are available at LNCS Authors Instructions Page (pdf).
- Each paper will be judged on its originality, significance, technical quality, relevance to ADC and this special track, and presentation.

- ADC follows single blind review which means that authors' information must be included in the submission.

Note:

- The submissions of a paper or extended abstract should be regarded as an undertaking that, should the paper or talk be accepted, at least one author or the invitee will attend the conference to present the work.

- All attendees should register the main conference. There is no extra registration fee for special track itself.

Workshop chairs

Jun Shen, University of Wollongong, jshen@uow.edu.au

Jinyan Li, University of Technology Sydney, jinyan.li@uts.edu.au

Jiangning Song, Monash University, jiangning.song@monash.edu