Lianhua CHI

CONTACT   L.chi@latrobe.edu.au   61-3-94792454

RESEARCH INTERESTS   Machine Learning and Data Mining with particular interests in making sense of big data with effective, agile and interactive data analytics, especially in Health Care area.

EDUCATION

University of Technology Sydney, Sydney, NSW, Australia

Doctor of Philosophy *(Computer Science - Machine Learning)*   **Feb 2013 − Aug 2015**

Huazhong University of Science and Technology, Wuhan, Hubei, China

Doctor of Philosophy *(Computer Software and Theory - Data Mining)*   **Sep 2009 − Sep 2015**

Huazhong University of Science and Technology, Wuhan, Hubei, China

Master Degree Candidate *(Computer Software and Theory - Database)*   **Sep 2008 − Jul 2009**

Wuhan University of Science and Technology, Wuhan, Hubei, China

Bachelor of Engineering *(Computer Science and Technology)*   **Sep 2004 − Jul 2008**

Wuhan University of Science and Technology, Wuhan, Hubei, China

Bachelor of Literature *(English)*   **Sep 2005 − Jul 2008**

SELECTED AWARDS

External Honors 2018 by IBM Research

Young Global Changer Award in 2017 by Think Summit GLOBAL SOLUTIONS - G20

Romberg Grant Award in 2016 by Heidelberg Laureate Forum and University of Heidelberg

One of Top 200 Young Researchers Globally in 2016 by Heidelberg Laureate Forum

Best Paper Award by 17th Pacific-Asia Conference on Knowledge Discovery and Data Mining

Social Welfare Award in 2009 by Huazhong University of Science and Technology

HIGHLIGHT PROFESSIONAL ACTIVITES

Think 20 Summit GLOBAL SOLUTIONS, Berlin, Germany

Young Global Changer   **28th May 2017 − 31st May 2017**

Highlights:

- This summit, mandated by the German G20 Presidency, brought young visionaries from around the globe to Berlin to involve the views and ideas of the next generation into global problem-solving, and built a sustainable, long-term Young Global Changers network
- Over 1300 early-career professionals from 140 different countries applied for this programme. A jury selected 100 (representing 100 countries) of them to come to Berlin

The 4th Heidelberg Laureate Forum, Heidelberg, Germany

Invited Participant   **18th Sep 2016 − 23rd Sep 2016**

Highlights:

- The Heidelberg Laureate Forum is a one-week event combining scientific, social and outreach activities for young laureates in the field of mathematics and science to network with pioneers in the same field
- Over 2000 young researchers from all over the world applied for this programme. Only the 200 most qualified young researchers were granted this opportunity

La Trobe University, Melbourne, VIC, Australia

Lecturer in Computer Science   **Feb 2018 – Current**

Responsibilities:
- Conduct innovative and high impact research and produce high quality publications resulting from that research in data science
- Supervise Higher Degree by Research, honours and postgraduate students
- Design, coordinate and teach subjects and courses which provide a high quality learning experience that engages undergraduate, honours and postgraduate students

Harvard University, Cambridge, MA 02138, USA

Visiting Scholar   **Jun 2018– July 2018**

Responsibilities:
- Visited Gehlenborg Lab of Harvard Medical School for potential collaboration.

IBM Research, Melbourne, Victoria, Australia

Postdoctoral Research Scientist   **May 2015 – Feb 2018**

Responsibilities:
- Worked on the building of prototype system for visualising and exploring large amounts of data in an intuitive (to business people) way
- Worked on medical document annotation for Watson Health with Apache UIMA.
- Optimised hospital resource management with machine learning techniques and SPSS
- Worked on content alignment for Watson Education with Natural Language Toolkit (NLTK)
- Analysed and visualised big data in social media
- Evaluated event impacts on time series

University of New South Wales, Sydney, NSW, Australia

Data Specialist   **Apr 2015– May 2015**

Responsibilities:
- Exploration, interpretation and visualisation of Massive Open Online Courses (MOOC) data

University of Technology Sydney, Sydney, NSW, Australia

Visiting Researcher   **Mar 2012– Feb 2013**

Responsibilities:
- Collaborated with my colleagues and supervisors to solve existing problems and develop new theories on big data stream classification

DaMeng Database Co., Ltd., Wuhan, Hubei, China

Software Engineer   **Jul 2008– Mar 2011**

Responsibilities:
- Designed the OLAP system interface and programmed OLAP application using Java
- Managed and designed data warehouse, processing a variety of large-scale data from different data platforms
- Occasionally worked as a database trainer and have trained 150+ government officials from different developing countries.

- *Organising Committee Member* - IJCAI-19: The 28th International Joint Conference on Artificial Intelligence
- *Organising Committee Member* - IJCAI-ECAI-18: The 27th International Joint Conference on Artificial Intelligence and the 23rd European Conference on Artificial Intelligence
- *Program Committee Member* - NAACL-HLT-18: The 16th Annual Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies

- *Organising Committee, Program Chair (Application Track)* - AusDM 2017: The 15th Australasian Data Mining Conference
- *Program Committee Member (Application Track)* - AusDM 2016: The 14th Australasian Data Mining Conference
- *Reviewer* - WWWJ: World Wide Web Journal
- *Reviewer* - IEEE Intelligent Systems
- *Reviewer* - Australasian Journal of Information Systems

LEADERSHIP AND VOLUNTEER ACTIVITIES

IBM Research Australia, Melbourne, VIC, Australia

Volunteer Organiser of Women Meetings   **Jan 2016 − Jan 2017**

Responsibilities:
- Organised the women meeting once per month during 2016 to motivate women to communicate and interact with each other in IBM women community
- Introduced heroines in STEM area and inspired women to actively take leadership.
- Further helped improve the visibility of women in IBM community.

HUST Alumni Association in Australia, Sydney, NSW, Australia

President   **May 2014 − Sep 2015**

Responsibilities:
- Managed a highly dedicated executive team and oversaw overall operations and events
- Coordinated meetings necessary to implement plans and strategies

Cancer Council NSW, Sydney, NSW, Australia

Database Administration   **Mar 2015 − May 2015**

Responsibilities:
- Managed the employee and volunteer database
- Designed the Christmas gift wrapping volunteer database

Mustard Seed Uniting Church, Sydney, NSW, Australia

Playtime Volunteer   **Jan 2015 − Mar 2015**

Responsibilities:
- Interacted with carers and children, assisted them and talked to them
- Encouraged carers in their parenting skills and assisted children to socialise

PATENTS

Lianhua Chi, Bo Han, Anna Phan, Chris Butler, Juerg von Kaenel, "SYSTEM AND METHOD FOR UNSTRUCTURED METADATA CORRELATION", US YOR920160975US1, filed 2017

Lianhua Chi, Alessio Bonti, "SYSTEM, METHOD AND COMPUTER PROGRAM FOR A COGNITIVE MEDIA STORY EXTRACTOR AND VIDEO COMPOSER", US YOR920161026US1, filed 2016.

Lianhua Chi, Alessio Bonti, "SYBIL IDENTIFICATION MECHANISM FOR FRAUD DOCUMENTS DETECTION THROUGH COGNITIVE BASED PERSONAL ENCRYPTION KEY", US YOR920161667US1, filed 2017