Data-Driven Integrative Intelligent Systems

Expertise in machine learning, data mining and deep learning. Leading in the field of multi-source data analytics, especially on the topics of information filtering and recommending, false online information detection, human activity recognition and prediction and human-machine interactions.

Competitive advantage

- Developing novel data mining and machine learning algorithms to conduct effective data analytics by discovering useful and actionable patterns from heterogenous multi-source data
- Experience in designing and building systems and tools to enable and improve various data analytics applications in health care, cyber security and smart cities

Impact

- Advanced algorithms for improved automation and better support for human-autonomy partnership
- World-class data analysis for improved collaborative reasoning and decision-making process

Successful applications

- Trust-aware distributed AI autonomy
- Context-aware intent prediction for human-autonomy cooperation
- Improving resilience of autonomous cyber defence systems with self-healing
- Opinion fraud detection
- Thing-of-interest recommendation in the Internet of Things

Capabilities and facilities

- GPU-accelerated Data Analytical Platform

Our partners

- Raiz Invest Limited
- Office of Naval Research, US Department of Naval
- Defence Science and Technology Group
- Data to Decisions CRC

More Information

Dr Lina Yao

School of Computer Science and Engineering

E: lina.yao@unsw.edu.au

UNSW Knowledge Exchange

knowledge.exchange@unsw.edu.au

www.capabilities.unsw.edu.au

+61 (2) 9385 5008