



Decision Systems & e-Service Intelligence Laboratory

The Decision Systems & e-Service Intelligence (DeSI) Laboratory was established in 2002 by Professor Jie Lu. In 2008 it became one of five laboratories within the Centre for Quantum Computation and Intelligent Systems, a Priority Investment Research Program of the University of Technology, Sydney.

The research objective of the DeSI Laboratory is the development of theories, methods, software tools and applications in the areas of decision support systems, uncertain information processes and e-service intelligence. The Lab also commits to real-world problems of government and industry to improve business intelligence and support decision-making by the provision of powerful software tools.

The Laboratory's key research areas are:

- Decision support systems
- Multi-criteria decision making
- Multi-level decision making
- Fuzzy optimisation and fuzzy decision making
- Uncertain information processing
- Situation awareness
- Cognitive decision models
- Learning-based prediction
- Web intelligence and ontology
- e-Service and e-Business intelligence
- e-Government service personalisation
- Recommendation systems
- Case-based reasoning and maintenance
- Genetic algorithms
- Early warning systems
- Emergency and risk management
- Cloud computing

The Laboratory's application domains include:

- material, product and service evaluation
- social crisis prediction, warning and anti-terrorism
- business strategy and resource planning
- logistics and customer relationship management
- online service systems
- finance situation warning

The major achievements of the Laboratory, since 2002, are:

- Five ARC Discovery Projects in the fields of decision-making, warning systems, and recommender systems over ten other grants
- A European Commission project under the Seventh Framework Programme (FP7) on Risk Management
- Over 300 publications in international refereed journals and conferences
- *Collaboration with internationally renown researchers and visitors*
- Engagement with government agencies and industry in Australia and overseas

For more information, contact the Decision Systems & e-Service Intelligence Research Laboratory by email at: qcis-centre@uts.edu.au, or visit their website at: <http://decide.it.uts.edu.au/> (or in the QCIS website: <http://www.qcis.uts.edu.au>).