

New South Wales

University of Technology, Sydney

FT0990811 Dr S Li

Approved Project Title **Spatial Cognition—Expressive Representation Formalisms and Effective Reasoning Mechanisms**

2009 : \$ 85,800

2010 : \$ 171,600

2011 : \$ 171,600

2012 : \$ 171,600

2013 : \$ 85,800

Primary RFCD 3803 COGNITIVE SCIENCE

Administering Organisation University of Technology, Sydney

Project Summary

The project will contribute significantly to the advancement of knowledge in breakthrough science in qualitative spatial reasoning and smart information use in geographic information systems. Expressive spatial languages are important in organising spatial knowledge, defining spatial query languages and guiding spatial data mining. Effective spatial reasoning mechanisms bring theory closer to applications including consistency checking and spatial query pre-processing. The project will help in extracting knowledge from massive spatial databases, meeting the growing needs of naive users for spatial information and establishing Australia as a major player in spatial cognition research and in the development of geo-location services.