

Summary of Discovery Projects Proposals for Funding to Commence in 2010

Queensland

Central Queensland University

DP1096780 Prof Q Han

Approved Project Title **Investigating the Effects of Network-Induced Delays on Networked Control Systems**

2010 : \$ 90,000

2011 : \$ 80,000

2012 : \$ 80,000

Primary RFCD 2301 MATHEMATICS

Administering Organisation Central Queensland University

Project Summary

Networked control is the current trend for industrial automation. The results of this project will be the first in the world to contribute directly to a deeper understanding of both negative and positive effects of network-induced delays on networked control systems. It will firmly place Australia at the forefront of this research by developing cutting edge technology for reliability and efficiency of industrial networked-based control systems. This novel frontier technology will result in cost-saving and improved productivity for Australian industries, e.g. manufacturing industries, power stations, processing industries, automotive industries, vehicular networks and locomotives.

DP1095498 Dr Y Xiang; Prof W Zhou; Dr Y Xiang

Approved Project Title **Tracing real Internet attackers through information correlation**

2010 : \$ 80,000

2011 : \$ 70,000

2012 : \$ 70,000

Primary RFCD 2801 INFORMATION SYSTEMS

Administering Organisation Central Queensland University

Project Summary

If this research accomplishes successfully, it will be a big step forward on tracing Internet attackers in terms of traceback scope, accuracy, usability and deployment. This will empower authorities to control and punish Internet crime and terrorism. It will also greatly reduce the damage caused by Internet crime and terrorism. The prototype of the distributed information correlation tracing system can possibly be patented or even be commercialised. The capability of a nation to trace the real source of any attacks on its information infrastructure is central to the control of such attacks and hence to a nation's long-term survival and prosperity.