



School of Integrated Technology (SIT)

# SIT SEMINAR

- Energy Technology(ET)
- Culture Technology(CT)
- Intelligent Robotics Technology(RT)**
- Common Subject

**Thursday, April 6<sup>th</sup>, 2017, 17:30 P.M.**  
**Room No. 109, Dasan bldg. 1<sup>st</sup> Floor**

*(Host: Prof. Kim, Mun Sang / Language: English)*

**Robots helping to care for older people  
and robots helping in orchards**

**Prof. Bruce Alexander Macdonald**  
**Univ. Auckland**



The presentation will introduce our Centre for Automation and Robotic Engineering Science (CARES) group and some of our projects, in particular our healthcare robotics research and trials of the Healthbots project software for care of older people, and our orchard robotics project. We have designed applications to assist with entertainment and companionship, medication management, exercises, education, vital signs monitoring, as well as activity and fall detection.

One study included robots in independent living, rest home, hospital, reception, cafe, doctor's waiting room, an observational study in the dementia unit, and accelerometer studies of falls and activity. Another study included a robot screening for information in a family doctors' practice.

A current study is evaluating robots to help people at home with respiratory health issues who often need hospitalization. Another is starting the design for robots to help people with dementia. Our orchard robotics project is a partnership with other research organizations to make a multipurpose robotic platform for orchard operations such as pollination and harvesting.