

A cross-disciplinary research environment dedicated to understanding how humans interact with real-world robotic agents and responsive structures within the context of assistive technologies, creative communities and human futures.

### Competitive advantage

- Leading expertise in design and evaluation of human-focused technologies and multi-disciplinary approaches to human-computer and human-robot interfaces
- Dedicated spaces for designing, testing and evaluating new technologies and robots
- Extensive experience co-designing with industry
- Worldwide network of industrial and creative community partners

### **Impact**

- Creating an awareness of social aspects of robotics
- Incorporating art, design and creativity as key dimensions in robotics
- Changing the ways in which assistive technologies can resolve situations with social stigma
- Increasing home safety and assisting the elderly to stay at home longer

## More Information

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# Successful applications

- Conducted world-first cross-cultural studies in robotics across socio-economic groups and countries
- Work in autism therapies: playful, therapeutic and educational interfaces that a child can learn with the Kaspar robot
- Proofing trials of wearable technologies for fall and seizure detection, and early-detection and monitoring of cognitive impairment through indoor movement

### Capabilities and resources

- Dedicated spaces for designing, testing and evaluating new technologies and robots, while collecting an ever-improving array of complex human datasets in the National Facility for Human Robot Interaction Research
- Experts in autism, technology, people, culture and robot morphologies at the Creative Robotics Lab
- Biggest data collections in the world on how humans interact with robotic technologies
- · Diverse partnerships across robotics, artificial intelligence, psychology, rehabilitation medicine and interactive media arts

#### Our partners

- Australian Defence Science and Technology
- · Bridgestone Digital Innovation Team
- Data61
- Fuji Xerox Innovation Japan

- St Vincent's Kai and Rehabilitation Clinic
- US Air Force