# A/Prof Rachel Cardell-Oliver

### A/Prof Rachel Cardell-Oliver

Chief Investigator

**Theme 2**

Associate Professor Rachel Cardell-Oliver is a computer scientist who designs intelligent systems that integrate data measurement with wireless communication systems, using environmental sensors and data collection. Another area of her research is data mining, which involves searching for patterns among large data sets.

 Rachel's research on sensor networks addresses practical and theoretical challenges for achieving end-to-end reliability, given the stringent resource constraints of these systems.  The results of her research have been applied in many areas, including smart water metering, monitoring rammed earth buildings, data mining of public transport ticket logs and environmental monitoring of Australian bushland.

## Publications

- Cleaning and visualization of unstructured text in safety records (...) —

# Conference Publishing

## Dr Michael Stewart

**Authors: Michael Stewart1, Wei Liu1, Rachel Cardell-Oliver1 And Mark Griffin**
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## Presentations

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## Awards and Prizes

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## Tools

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Rachel is an enthusiastic teacher, leading first-year programming classes, the theory of computing, and master's courses on wireless sensor networks. She has also published research on how students learn to program. She currently teaches Object-oriented Programming and Software Engineering and Mobile and Wireless Computing.

Rachel's specialist areas within the research theme two include:
• Design of intelligent systems that integrate data measurement with wireless communication systems
• Sensor networks for monitoring built and natural environments
• Virtual sensors and soft sensing
• Data mining, which involves searching for patterns in large data sets.

She is interested in projects /problems related to wireless sensor networks, virtual sensors and soft sensing; Energy-efficient sensing; Data mining of sensor data for making reliable decisions for maintenance.

Rachel is a Chief Investigator in Research Theme 2

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