THE CURTIN INSTITUTE FOR COMPUTATION

Curtin University
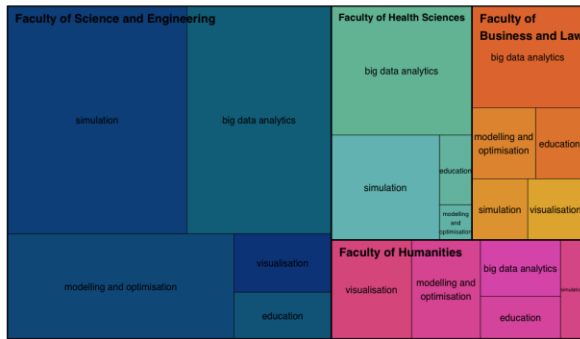THE CURTIN INSTITUTE FOR COMPUTATION

Meeting the increasing demand for research software and computing skills across all faculties

Who We Are

The Curtin Institute for Computation (**CIC**) was established in 2015 to provide **dedicated computational support** to Curtin University's research community in order to solve complex problems.

The CIC is a multidisciplinary virtual institute, **inspiring and fostering collaborative and interdisciplinary research** across Curtin University. The CIC has **>200 members** from Curtin's 4 faculties (Business and Law, Humanities, Health Sciences, and Science and Engineering).
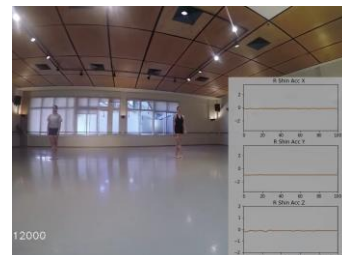
What We Do

The CIC has **5 core themes**: big data analytics, simulation, modelling and optimisation, visualisation, and education.

The CIC has a growing **team of data scientists** who work closely with researchers on a wide variety of projects, providing expertise across our 5 themes (check out the **3 case studies below!**).

The CIC provides face-to-face training through **Software Carpentry, Python**, **R,** and **machine learning** workshops.

Outcomes

Activity	Number
Research Projects	> 50
Papers (published or in prep)	> 30
Software/frameworks/ pipelines	> 60
Visitor program	3 rounds, with ~$75k granted
Training workshops	>500 HDR and ECR

2018 Curtinnovation award winner for the 'Brains + Grains' Harvest Optimisation project- see the video here!

Natural Language Processing Case Study: Analysing violent extremist communications and their uptake in the media
- *Humanities*
- *Curtin Institute for Computation*

Machine Learning Case Study: Activity recognition of ballet dancers using wearable sensors
- *Health Sciences*
- *WA Performing Arts Academy*
- *Curtin Institute for Computation*

Mathematical Modelling Case Study: Brains + grains = gains: a novel decision-making tool for farmers
- *Science and Engineering*
- *Global Grain Handling Solutions*
- *Curtin Institute for Computation*

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