

Department of Physics & Astronomy, & sirca

Science and Industry Endowment Fund Research Project RP04-174

“Big Data Knowledge Discovery: Natural Science Meets Machine Learning”

Workshop on “Clusterous: Easy Cluster Computing with Docker and AWS”

When: Monday 18 April 2016

Time: 10:00am - ~1.00pm

Where: Building E6A, Lecture Theatre 102

Presenters:

Members of the Photonics Dynamical Systems (PDS) Group, MQ~Photonics Research Centre, Macquarie University, <https://research.science.mq.edu.au/photonics-dynamical-systems/>

Members of the project team at Sirca, <http://www.sirca.org.au/>

The partnerships in the “BDKD” project were formed so that research scientists would interact with data scientists and computer/database specialists for the purpose of researching new tools and approaches to knowledge discovery harnessing machine learning and accessing increased computing power. One of the outcomes and outputs from the project is “Clusterous”, developed by Sirca. This is a cluster computing environment using Amazon Web Services (AWS). In this presentation members of the PDS Group at MQ will briefly introduce their science as an example of an area where the experimental capability to generate bigger data from computer controlled experiments has opened up significant new opportunities which require a larger compute across bigger data to answer research questions. Sirca has also worked with scientists in forest ecology and geoscience in developing Clusterous. Then, the Sirca team will introduce Clusterous and both teams will illustrate its use in the PDS context. The presentations will be given in a way to communicate the potential benefit that Clusterous brings to a broad range of research areas. All the software is in the public domain via GitHub. There will be plenty of opportunity for researchers to ask questions to gain a real sense of what time investment and learning tasks will be involved for them to build the knowledge to start using these tools. For those who already undertake high power computing it is an opportunity to learn how they might use the AWS environment to augment or meet their computing needs.



Please email
deb.kane@mq.edu.au
if you plan to attend.
Subject line: “Clusterous”