James Boocock

Curriculum Vitae

Education

2012–2013	**Diploma for Graduates**, *The University of Otago*. Genetics and Statistics
2008–2012	**Bachelor of Science**, *The University of Otago*. Computer Science

Work Experience

Mid-2012– Present — **Assosciate Research Fellow**, *Biochemistry Department*, University of Otago.

Researching Structural variation in plants and human DNA sequence. The project involved analysing full genome sequence of apple varieties and developing a method for assessing significance of polymorphic copy number regions. Analysing the full 1000 genomes dataset, processing initially on amazon using a XML-RPC server for dispatch creating summary data for download and using NESI Load Leveler HPC resources to assess copy-number variation. Both parts of this project are still in progress

Skills Required
- Large dataset processing.
- Parralelisation of tools.
- HPC usage and scripting
- Python
- Bash
- Unix Command-line

2012–2013 — **Summer Studentship**, *Summer Of eResearch*, Biochemistry Department, University of Otago.

Worked on an interface between galaxy and IBM load leveler. Other work from the project involved developing a bioinformatics pipeline for analyses of selection signatures. The pipeline is currently in preparation for publication and can be found. here

2012–2013 — **Summer StudentShip**, *Summer Of eResearch*, Biochemistry Department, University of Otago.

The project focused on maintaining a local galaxy bioinformatics instance. Added a large amount of tools to the local galaxy instance requiring scripting in bash and python. The github repo for that project can be found here. Ongoing work from the project involved developing a bioinformatics pipeline for analyses of selection signatures. The pipeline is currently in preparation for publication and can be found. here

2011-2013 — **Demonstrating**, *Computer Science Department*, University Of Otago.

Demonstrated three computer science papers first and second year over three years focusing on algorithms and datastructures. C and Java were the languages used for these papers.

2011-2013 **Private Tutoring**, *Computer Science*, University of Otago.
Maintained a posistion tutoring two students through many computer science papers in the second and third year of their computer science degree.

Academic

2013 In preparation Selection Pipeline

2013 Oral Presentation at the California Business Conference

2013 Poster at the Annual Business Conference in Oregon

Skills

Basic Linear Algebra

Intermediate Java,C,C++,R,Linux System Administration, Parralel Programming,IBM Load Leveler,Statistics

Advanced Python, Unix Command-line

Interests

- Piano
- Cooking
- Running

- Chess
- Dancing