

# BYRON VICKERS

## Data Scientist, Analyst and Developer

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based in Canberra, Australia

### Education

PRINCETON UNIVERSITY – Princeton, NJ (USA)

**Masters, Statistics and Machine Learning**, Completed Feb 2017

AUSTRALIAN NATIONAL UNIVERSITY – Canberra, ACT (AUS)

**Bachelor of Philosophy (Hons 1), Physics and Maths**, Completed Dec 2011

### Technical Skills

**Core tools/languages:** Python, SQL, R, Django

**Core competencies:** Machine Learning, Statistics, Modelling, Data Analysis, Software Development

**Additional tools/languages:** Javascript, SSMS, AWS

### Relevant Professional Experience

**Data Analyst/Programmer**, Oct 2017 to Present – DEPARTMENT OF EDUCATION AND TRAINING, Canberra

Work as one of two team leads to handle a variety of reporting and analysis needs within the Department. Day-to-day responsibilities range from ad-hoc data reporting to larger projects such as developing reporting infrastructure, and multiple projects involving high-level analysis skills.

- Working to build a clean reporting layer on top of the current source-structured data warehouse. This simplifies analysis, increases reproducibility of results, and cuts down on duplication of effort across multiple similar queries/reports.
- Building a set of automated, user-customisable reports to reduce time spent on ad-hoc queries.
- Creating predictive models for risk assessment and proactive fraud detection within the Department's activities.

**Analyst – Systems and Development**, Feb 2017 to Oct 2017 – AUSTRALIAN NATIONAL UNIVERSITY, Canberra

Worked within the Dean's Office of the College of Engineering and Computer Science to conduct a variety of analyses both internally and externally, as well as operating in a high-level advisory capacity for an ongoing large software project.

- Worked with a major ANU business unit to conduct a joint internal and external review of strategic approaches across the sector with regards to several ongoing sector-wide shifts. The goal is to develop a strategy which will enable the university as a whole to adapt to – and pre-empt – ongoing and upcoming transformations in the sector.
- Worked with a small development team in a project-manager role to ensure successful project outcomes and smooth adoption of the new technologies across the College.

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### **Co-founder, CTO and Lead Developer, Jul 2013 to Oct 2016 – MADE FOR ME, Canberra**

Technical lead for Canberra-based startup, providing web services for 3D printing professionals.

- Architected and developed a web application providing high-accuracy predictive pricing for 3D print services, report generation and workflow management for service providers, and automated order management for customers.
- Worked with internal and external stakeholders to develop and clarify requirements both prior to and as an integral part of the development process.
- Used AWS Cloud Services to achieve high-uptime, low-latency availability worldwide for customers worldwide.
- Streamlined deploy process enabling frequent application updates with automated testing and simple rollback if required.
- Technologies used: Python, Django, Bootstrap, Amazon AWS

### **Research Software Developer, Oct 2011 to Aug 2012 – AUSTRALIAN NATIONAL UNIVERSITY, Canberra**

Worked with professors across several research schools at the ANU to develop fast, reliable software to assist with their research needs. Required ability to learn new languages on-the-fly and integrate effectively with existing codebases.

- Technologies used: R, MATLAB, Python, FORTRAN

### **Software Testing and Support, Sep 2009 to Sep 2011 – AUSTRALIAN NATIONAL UNIVERSITY, Canberra**

Responsible for testing and support of ANU's Learning Management System. Worked with ANU's central online learning and teaching team to investigate reported bugs, test new system deployments, support users, and develop user documentation.

- Technologies used: HTML, CSS, PHP

### **Web Application Developer, July 2008 to Jan 2009 – AUSTRALIAN NATIONAL UNIVERSITY, Canberra**

Developed a novel self-assessment tool for the ANU's Graduate Information Literacy Program (GILP). The system enabled staff within GILP to craft quizzes for graduate students at the university, which students would then take to determine their level of understanding and which offerings of GILP were most suited.

- As the sole developer, worked closely with GILP staff to develop requirements and scope the project. The system received positive feedback from both staff and student users after go-live.
- Technologies used: HTML, CSS, Javascript, PHP, MySQL