



## Employment

### Co-founder & CTO

#### Keen Kiwis Ltd

September 2012 – September 2014

- Product design, MVP creation, market research and consumer validation
- Implemented scalable Django app on AWS with MongoDB & Neo4j (including asynchronous processing)
- Designed full API and implemented proprietary social graph algorithms on MongoDB and Neo4j
- Developed full feature native android app (like Tinder but for events)
- Took part in New Zealand's most prestigious start up accelerator – Lightning Lab

### Lead Developer (team of 3)

#### National Australia Bank (contractor via Kakapo Technologies)

August 2011 – March 2014

- Reconciliation & Reporting Tool (Python services + Webapp) – complicated data analysis platform that takes feeds of data (csv, flatfile, sql) from 40+ wholesale trading systems, transforms and compares data
  - Developed new features – data feeds, financial instruments, data transformations, report rendering in xlsx, website data view enhancements
  - Enhanced existing features – new data views on website, reduced on demand report comparison and rendering time by up to 400%
- Confirmation Server (Java, XSLT & Sybase Server + VB6 GUI) – produces letters of confirmation for creation and amendment of Interest Rate Derivative and Bond trades
  - Implemented end to end data solution to deliver confirmations of new tailored business loans to NZ Post daily
  - Various business enhancements to support more granular interest rate margin breakdowns

### Software Developer, Intern

#### Scion (formerly Forest Research NZ)

November 2008 – February 2009

- Transformation of point data from tree ring images into 3D models for viewing in Blender (C++)

## Education

### Christchurch, NZ

#### University of Canterbury

2007 - 2011

- B.Sc. (First class honours) in Computer Science and Mathematics (published paper in ECMS)
- Started Ph.D. but exited programme after Research Proposal accepted to accept job offer.

Coursework: Algorithms, Calculus, Computer Visualisation, Cryptography, Data Structures, Information Warfare, Linear Algebra, Programming, Security, Software Engineering, Simulation

## Other Work Experience

- Projects – ResultShark (record and compare cycling results over multiple races, Google App Engine + Twitter Bootstrap); UBook (NZ adventure tourism booking platform, prototype app built with Django + MySQL)
- Websites – APR Consultants (2007); Rotorua International Two Day Walk (full site + event entry & credit card payment integration, PHP & MySQL)

## Scholarships and Awards

- University of Canterbury Emerging Leaders Scholarship in Mathematics (2007)
- Rochester and Rutherford Hall Scholarship (2007)
- Rotorua Young Leaders Scholarship (2007 – 2010)
- Andy Burnett Memorial Scholarship (2007)
- NZQA Scholarship Statistics and Geography (2006)

## Languages and Technologies

- Python; Java; C++; MS SQL; Sybase; Oracle; Neo4j; MongoDB; JavaScript; XSLT; XML; HTML/CSS
- Android; Django; Celery; WebPy; Google App Engine; Push notifications (Android & IOS); Connect Direct; MQ & RabbitMq;
- Eclipse; Visual Studio; PyCharm

References available on request.