Gabriel Rawcliffe - Full-stack developer



gabriel.rawcliffe@gmail.com

+64 22 3669927

New Zealand citizen

I am a freshly minted full-stack developer with a background as a scientific researcher. I love problem solving, rock climbing, and the outdoors. After 8+ years researching protein evolution, and kauri dieback disease, I am excited to move into a career in the tech industry after falling in love with the fast-paced problem solving of coding when I dipped my toes into Python as part of my research. I kick-started my full-stack journey by completing Dev Academy Aotearoa's immersive, bootcamp style course.

In both tech, and research, inspiring others to share enthusiasm for projects is important. I was lucky to work on a final project at Dev Academy Aotearoa that I had pitched and watch the rest of the team become inspired as they explored the possibilities that the project offered them. I love that what I make the tech space can be interacted with by real people, and hopefully effect their lives in a positive way. I would love a career that combines my passions for biology and tech, but more importantly I want to work in roles that allow me to learn, grow, and to find solutions to problems that face people and their communities.

Experience

Student, Dev Academy Aotearoa | June 2023 - October 2023

Key skills and responsibilities:

- <u>Technical development</u>: The course is an immersive, bootcamp-style, full-stack development course; as such, a key aspect of the course was learning a huge amount of content in 15 weeks. Through self-driven learning, live lectures, group projects, and personal projects, I went from having zero web development knowledge, to being able to produce full-stack web applications.
- Teamwork: A significant part of the course focussed on developing skills that would help us work better as a team. I became comfortable coding in live-share sessions and giving and receiving compassionate and constructive feedback. For me personally I think I realised that when leading a team, the best way to quickly build an effective culture is to get everyone as passionate about an idea as you are; this often means giving people the opportunity to explore the concept to find the aspects of it that inspire them.
- <u>Project planning</u>: We learned agile methodologies. For me my biggest takeaway was related to how planning changes as the work of individuals becomes more overlapping. In most of my previous teams, there was a distinct separation of concerns. However, in the projects we worked on in this course, individuals work on much more closely related tasks. This meant that planning was often far more detailed, and over-all, project goals were more fine-grained to allow for easier integration.

Assistant research fellow, University of Otago | 2019 – 2023 Department of Pharmacology and Toxicology

Key skills and responsibilities:

- <u>Project planning</u>: I was the lead researcher on a multi-year project, meaning I built on my ability to break down a large project into smaller pieces for myself and a team. I planned out experiments using a variety of lab and computer-based methods, with consideration of Vision Mātauranga, and with key checkpoints in mind.
- <u>Problem-solving</u>: I was working with a very poorly understood organism, and therefore, ended up designing new experimental methods to overcome research problems. I also found ways to integrate the current expertise of the lab group into the specific challenges related to this project.
- <u>Collaboration</u>: I was lucky to work with talented researchers in Auckland, Wellington, and the UK. The work I was doing was directly impacted by results from the Wellington and Auckland teams, therefore, I

- maintained strong communication with the relevant team members and facilitated sharing of results and plans amongst the research teams.
- <u>Teaching</u>: Part of my role was to teach new lab members relevant techniques and protocols. I really enjoyed this process as it was extremely satisfying watching people start to generate research data independently. It's also a fun challenge remembering that each aspect of a task, no matter how basic it now seems to me, is something completely new to the person I am teaching.

PhD researcher, University of Otago | 2015 – 2019 Department of Biochemistry

Key skills and responsibilities:

- Research: I generated novel scientific research using a range of lab methods as well as researching the existing work in the field. This has given me the ability to quickly understand technical and specialised topics using numerous sources.
- <u>Communication:</u> I was lucky to present my work in front of a various audiences, each with a different understanding of the topic. This allowed me to grow further as a public speaker and communicator of a highly specialised subject. My presentations ranged from 3-45 min talks, to poster presentations.
- Resilience: A key aspect of any PhD is the ability to overcome challenges and push through failures, and, I'm particularly proud of the challenges I overcame. I spent over 18 months failing in countless different ways to develop a repeatable method to replicate a theoretical evolutionary process. Eventually, I was able to develop a process, and produced novel and interesting findings.

Other experience:

- Undergraduate laboratory supervisor and demonstrator University of Otago | 2014 2018
- Research assistant University of Otago | Dec 2014 March 2015
- Plant operator/detailer Fletcher reinforcing, Dunedin | 2014
- Plant operator/STMS manager/labourer Higgins Contractors, Napier | various roles 2007 2012
- Relief early childhood teacher Ranted Education, Palmerston North | 2009 2011
- Hockey player/coach KHC Dragons, Antwerp, Belgium | 2007

Tech stack

JavaScript
HTML
CSS
React.js
Node.js
SQLite
Knex

Qualifications

Ph.D. (Biochemistry), University of Otago, 2019

BSc Honours (1st class), University of Otago, 2014

BSc (Biochemistry and Microbiology), Massey University, 2012

Community Involvement

2021 - present
2016 - 2018
2015 - 2017
Volunteer route setter - Resistance Climbing gym.
President - Albany Hockey Club, Dunedin.
Head coach - Southern Under 21 hockey team.

Referees

A list of referees will be provided on request.