

Rhys Compton

SOFTWARE ENGINEER · MACHINE LEARNING ENGINEER

180a Studholme Street, Morrinsville, 3300, New Zealand

☎ (+64) 27-817-0790 | ✉ rhys.compton@gmail.com | 🏠 www.rhyscompton.co.nz | 📺 basedrhys | 📷 basedrhys

“The first principle is that you must not fool yourself—and you are the easiest person to fool.”

Summary

A recent graduate from the University of Waikato, I have a strong interest in Machine Learning (ML) and particularly how it can be applied in the healthcare field. I have experience over a range of ML problem domains and with my varied work experience am able to provide *real* value from the use of ML both in business and research. I am fortunate enough to be a Fulbright awardee and will be travelling to the USA to pursue my Masters in August 2020. I am quick to learn new technologies and enjoy using my creativity to solve challenging problems.

Education

University of Waikato

Hamilton, New Zealand

BE (HONS), FIRST CLASS HONOURS, SOFTWARE ENGINEERING

Feb. 2016 - Dec. 2019

- FCMS Dean's Award of Excellence (Top 10 students for each year group)
- Taught Postgraduate Scholarship (Semester A)
- Taught Postgraduate Scholarship (Semester B)

Skills

Back-end PHP, Laravel, Node.js

Front-end Vue.js, HTML, CSS

Programming Python, Java, C#, Assembly, PLC

Machine Learning Fast.ai, PyTorch, TensorFlow, SQL

MLOps AWS, GCP, Docker, Azure DevOps, Bitbucket Pipelines, Weight & Biases

Work Experience

Rezare Systems

Cambridge, Waikato

MACHINE LEARNING INTERN

Nov. 2019 - Feb. 2020

- Self-directed a project developing a deep-learning based object detection model to count animals using FAIR's Detectron2 library. The project involved planning around business priorities, collecting and labelling data, and validating model performance.
- Using Docker, created an automated pipeline for model versioning and deployment using Azure DevOps and AWS ECR
- Performed research examining the viability of synthetic data in this domain and an empirical analysis of masking unlabelled data, using Weights & Biases to track these experiments.

Rocketspark

Cambridge, Waikato

MACHINE LEARNING INTERN

Nov. 2018 - Nov. 2019

- Created a neural text-generation model using OpenAI's GPT architecture trained on over 400k webpage's data, acquiring valuable experience from planning, scoping, and executing a ML project from inception to completion.
- Deployed the model as a scalable API using Docker and Google Cloud Run. This tool can provide Rocketspark users with relevant, SEO-friendly text to use on their site, improving search rankings and overall traffic.
- Created an automated testing pipeline with Bitbucket Pipelines and developed automated browser- and unit-tests.

Pepper Creative

Hamilton, Waikato

AR SOFTWARE DEVELOPER

Aug. 2018 - Nov. 2018

- Developed an industrial AR application for the HMT-1Z1 headset. Rather than requiring FirstGas engineers to look through complex drawings, the wearable tool visually delineates where maintenance is required which greatly improves efficiency of the worker.

LuminateOne

Matamata, Waikato

FULL-STACK WEB DEVELOPER

Jul. 2018 - Nov. 2018

- Created a modern Single-Page ticketing and events web-app using Laravel and Vue.js with AWS Cognito used for user authentication.

University of Waikato

Hamilton, Waikato

HOLOLENS DEVELOPER

Feb. 2018 - May 2018

- Created an interactive music game using Unity for the Microsoft HoloLens (video on personal website). This project developed my creativity and intuition for making a captivating and *wow-inducing* user experience.

Oraka Graders

Cambridge, Waikato

COMPUTER VISION DEVELOPER

Nov. 2017 - Feb. 2018

- Developed a real-time computer vision application for carrot farming using C# and a PLC device. This built a strong foundation on algorithms and industrial computing with an emphasis on efficiency.
- Re-wrote an existing asparagus processing application from Delphi to C#

Career Central

Matamata, Waikato

INDEPENDENT SOFTWARE CONTRACTOR

Mar. 2017 - May 2017

- Ported a vanilla PHP website into the Laravel framework

St Peters School

Cambridge, Waikato

CLEANER

Dec. 2016 - Feb. 2017

- Vacuumed and cleaned bathrooms, as well as grounds-keeping work like moving logged trees, weeding, etc.

Private Care

Hamilton, Waikato

IN-HOME SUPPORT WORKER

Jul. 2016 - Nov. 2016

- Performed full care (showering, toilet, feeding, etc) for a 30 year-old male with physical and mental disabilities
- Carried out physical rehabilitation by taking him to the gym and pools.

Bowlarama

Palmerston North, Manawatu

CUSTOMER SERVICE/LANE TECHNICIAN

Sep. 2016 - Feb. 2016

- Completed general technical and maintenance work on the tenpin machines.
- Served customers as bar manager.

Palmerston North Hospital

Palmerston North, Manawatu

STUDENT RADIOGRAPHER

Aug. 2015 - Dec. 2016

- X-rayed patients from GP referrals, the Emergency Department, and the operating theater.
- Formed strong communication skills through interacting with patients and relaying sensitive information in a mature manner.

Gull Tordoff Auto Services

Morrinsville, Waikato

FORECOURT ATTENDANT

Nov. 2013 - Feb. 2015

- Actively served customers on the forecourt, with a focus on their satisfaction and convenience.

Honors & Awards

- | | | |
|------|---|-------------|
| 2019 | Science and Innovation Graduate Award , Fulbright New Zealand | New Zealand |
| 2019 | Excellence In Presentation , University of Waikato Engineering Design Show | New Zealand |
| 2019 | Excellence In Poster , University of Waikato Engineering Design Show | New Zealand |

Service & Advocacy

- | | | |
|------|---|-------------|
| 2019 | Class Rep , ENGEN582 - University of Waikato | New Zealand |
| 2017 | Class Rep , COMP242 - University of Waikato | New Zealand |
| 2015 | First Aid Certificate , St John New Zealand | New Zealand |
| 2014 | Head Boy , Morrinsville College | New Zealand |

Extracurricular Activities

5 Rupee

New Zealand

GUITARIST

Feb. 2013 - Dec. 2014

- **2013** - Regional Finalist, Smokefree Rockquest
- **2014** - Regional Finalist, Smokefree Rockquest

Private

New Zealand

DIGITAL ARTIST

May 2019 - PRESENT

In my spare time, I like to make music visuals for music/local musicians—examples of these can be found on my personal website.