

# SEAN RICHARDS

ordinarystarman@gmail.com · @OrdinaryStarman

*Seeking an ability to deliver change, to achieve positive social growth, or to contribute to a project advancing the frontier of human knowledge.*

## EXPERIENCE

2018 – PRESENT

**GRADUATE/TEACHING ASSISTANT, THE UNIVERSITY OF AUCKLAND**

As a Teaching Assistant (2018) and Graduate Teaching Assistant (2019-Present), I was responsible for coordination of the PHYSICS 107/G and ASTRO 100/G labs and test invigilation. This was a dynamic role that demanded competency in personnel management, task delegation, responsivity to online queries, and a large amount of face-to-face contact with students. During the COVID-19 pandemic, my role became digital, interacting with students through online platforms such as Zoom, Google Meet, and Piazza.

2017 – PRESENT

**GAME CONTROLLER, GREAT ESCAPE**

My primary responsibilities were to monitor team progress and offer help when requested or required, take payments, and complete backend administrative work utilizing the G Suite products. As time progressed I also moved into assisting with technical repair, prop repair, etc.

2013 – 2016

**SERVICE DELI / GROCERY ASSISTANT, NEW WORLD KERIKERI**

As a member of the Service Deli, I interacted with customers on a day-to-day basis. My primary responsibility was serving, though as time progressed I moved into roles including operating Graef Fully Automatic slicers, and cooking chickens. Conversely, as a Grocery Assistant, I worked under the direct supervision of the Inventory Controller as we migrated from an older stocktake system to SAP HANA. My roles included a rolling, daily stocktake of the storeroom and storefront, as well as assisting other Grocery Assistants in stocking the shelves where required.

## EDUCATION

FEBRUARY 2021

**MASTER OF SCIENCE, THE UNIVERSITY OF AUCKLAND**

I am working with Associate Professor J.J. Eldridge, investigating the merge rate of binary star systems. We consider how the gap between observations of gravitational wave mergers and theoretical predictions of rates can be influenced by a variety of physical parameters.

FEBRUARY 2020

**POSTGRADUATE DIPLOMA IN SCIENCE, THE UNIVERSITY OF AUCKLAND**

My primary work was writing a dissertation and 5000 word report, both listed in the *Selected Writings* section below. My primary accomplishments otherwise were completing a joint hardware/software upgrade of a satellite ground tracking station and achieving an A+ in the course *Relativistic Quantum Mechanics and Field Theory*.

**FEBRUARY 2019**

**BACHELOR OF SCIENCE, THE UNIVERSITY OF AUCKLAND**

I specialized in Computer Science and Physics. On the Physics side, I specialized in Astrophysics and theoretical physics, with a small amount of Photonics on the side. On the Computer Science side, my main specializations were algorithmics, theoretical Computer Science, and computability theory.

## SERVICE

**JANUARY 2020 – JANUARY 2021**

**TREASURER, PHYSICS ASSOCIATION OF THE UNIVERSITY OF AUCKLAND**

The Treasurer of PAUA is a traditionally integral role to the running of the club; monitoring finances, and committing expenditure. Management of the club is achieved through the G Suite of tools, so this role demanded high competence with this. Prior to my election as Treasurer I helped complete a rewrite of the club's Constitution to modernize

**MARCH 2017 – APRIL 2018**

**COMMITTEE MEMBER, PHYSICS ASSOCIATION OF THE UNIVERSITY OF AUCKLAND**

As a committee member I was responsible for helping organize events, advertising the club, and assisting the other members of the Executive with accomplishing their tasks.

**SEPTEMBER 2016 – JULY 2018**

**PRESIDENT, THE UNIVERSITY OF AUCKLAND MAGIC SOCIETY**

As President, I was responsible for chairing the Executive Committee meetings, public liason, and recruiting new members. Under my leadership, we saw the Club grow from two friends in a room into a tightknit group of friends.

## SKILLS

- Communication
- Data Analysis
- Leadership
- Fluency in Python, PHP
- Working knowledge of C

## SELECTED WRITINGS

- *Compact Binary Merge Rates using BPASS* (Working Title, MSc Thesis)
- *System Overview of The University of Auckland Ground Station One* (5000 word report)
- *The University of Auckland: Ground Station One* (PGDipSci dissertation)

Copies, where possible, available on request.