

EDUCATION

- **Stellenbosch University** Stellenbosch, South Africa
Bachelors of Science Honours in Computer Science Feb. 2023 - Nov. 2024
- **Stellenbosch University** Stellenbosch, South Africa
Bachelors of Science in Computer Science and Mathematics Feb. 2020 - Nov. 2023

WORK EXPERIENCE

- **Outlier AI** Remote
Prompt Engineering Nov. 2024 - Present
 - **Math and language expert:** I got assigned to Math projects where I need to train an AI model via human reinforcement learning. I do this by coming up with Math problems where the AI model makes a reasoning error. Then I need to point out and fix that error by understanding the math and pointing out where the reasoning went wrong.

PROJECTS

- **Radio galaxy symmetry finder (Honours project)**
Python
 - **Reflexive symmetry:** I found reflexive symmetry on radio galaxies by applying principal component analysis on the radio galaxy images. I did unsupervised classification of the radio galaxies using the reflexive properties.
 - **Curved symmetry:** I found curved symmetry by using polynomial regression to fit a polynomial to form the nearest curved line. I used these polynomials to create feature vectors, which I used to perform supervised classification between radio galaxies.
- **Stock Wizard (application)**
Flutter, Android
 - **Backend:** I created backend server functions using NodeJS. These functions scrapes financial data from the web and returns it to the frontend client upon request.
 - **Frontend:** The frontend client I created using Flutter.
- **Message protocols research**
Java, Springboot, React
 - **Overview:** For one of my modules I got assigned to a company where we needed to research the different message protocols. We tested them between micro services.
 - **Backend:** The backend consisted of different microservice components. In addition, a PostgreSQL database was used.
 - **Frontend:** The frontend served simply as a dummy to communicate between the back-end components. It was a basic user website with some functionality.
 - **Conclusion:** The conclusion was that the AMQP message protocol was the most effective in terms of ease of setup and speed.
- **Markdown collaboration**
React, NodeJS
 - **Overview:** A team project for one of my modules: A webapp where multiple users can collaborate on a markdown note at the same time.
 - **Backend:** The backend consisted of a PostgreSQL database to store user and note data. It also managed the websocket functionality that allows multiple users to collaborate at the same time.
 - **Frontend:** The frontend was done in React. It consisted of a login page with email verification. The main page was the note collaboration page.