OSCAR STRACHAN

strachan.oscar@gmail.com | 0468 877 791 | linkedin.com/in/oscar-strachan github.com/StrachanOscar | strachanoscar.github.io/Oscar-Strachan-Portfolio-Website

Personal Statement

An enthusiastic second-year UNSW Computer Science student with algorithmic problem-solving and backend development experience passionately honed through competitions and personal projects.

Education

University of New South Wales (UNSW)

September 2021 - Present

Bachelor of Computer Science

Courses: Data Structures & Algorithms, Software Engineering Fundamentals, Discrete Mathematics.

Technical Skills

Languages: C++ | Python | C | Java | MIPS | HTML | CSS | JavaScript | Shell | Bash

Technologies: Git | Python Libraries (NumPy, pandas) | ReactJS

Projects

Susquehanna International Group Algothon - 3rd Place

July 2022

Python (Numpy, pandas)

- Generated a heatmap matrix from given data using numpy that found correlated financial instruments.
- Implemented a mean reversion algorithm in Python that saw 15% return over new synthetic data.
- · Curated a related presentation that received the highest presentation score among all finalists.

Personal Project: Admin Dashboard

December 2022

MongoDB, ExpressJS, ReactJS, NodeJS

- Built a full-stack MERN application that can give businesses analytical insights from their transactions.
- Utilised MaterialUI, Redux Toolkit and Nivo Charts to organise and display transaction data graphically.
- Created a backend in Express and NodeJS that retrieved mock data with aggregate calls in MongoDB.

Personal Project: Equal Weighted S&P 500 Generator

January 2022

Python (Numpy, pandas, Responses, XlsxWriter)

- Generated an equal-weighted S&P 500 index fund based on a user's desired portfolio value.
- Utilised IEXCloud to make batch API requests that pull market data on the top 500 companies.
- Organised data into a pandas dataframes and formatted an Excel spreadsheet using XlsxWriter.

Personal Portfolio Website

December 2022

HTML & CSS

• Developed a website using the BEM methodology to summarise information relevant to employers.

Leadership

UNSW CompClub

February 2022 - Present

Treasurer

- Curated workshops that taught Python, HTML and CSS to 100+ high school students across Sydney.
- · Managed society financials using Microsoft Excel to ensure accurate budgeting and reimbursements.
- Conducted over ten interviews with prospective directorship and mentorship applicants.

Other Experience

Matrix Education

May 2022 - January 2023

Mathematics Teacher & Tutor

- Conducted weekly 1-on-1 tutorials with a 4.7/5 satisfaction rating on Years 7-12 Mathematics.
- Delivered weekly classes with a 4.5/5 satisfaction rating to 100+ students on Years 7-10 Mathematics.
- Developed 100+ pages of resources in Microsoft Word for the Year 3 Matrix Mathematics curriculum.