

WINTON NATHAN-ROBERTS

@ winton.nathan.roberts@gmail.com

0478 741 332

Portfolio Page

in winton-nathan-roberts

📍 Sydney, NSW

EXPERIENCE

Junior Full Stack Engineer

Metigy

📅 November 2020 – May 2021

📍 Sydney

- Work closely with engineering, product, customer service and design teams, to deliver high-quality solutions for Metigy customers
- Develop secure APIs with Node.js, PHP, AWS Serverless, and MySQL
- Develop front ends according to prescribed UX/UI with React.js
- Utilise BitBucket pipelines and versioning in docker environment
- Unit Testing, Acceptance and Regression Testing (Cypress, Jest)

Summer Research Project

Oracle via The University of Sydney

📅 December 2019 – April 2020

📍 Sydney

- Developed an algorithm for parsing plaintext security protocols described in HyperLTL into a monitor of logs for their violation
- Test Driven Development with CI/CD
- Wrote accompanying research paper and presented a seminar
- Python, PyTest, Git, GitHub

Software Engineering Internship

Rio Tinto Centre for Mine Automation

📅 January 2019 – August 2019

📍 Sydney

- Developed a polynomial time train scheduling algorithm for automated ore transport over the Pilbara mine train network.
- Test Driven Development with CI/CD
- Documentation via \LaTeX reports, Jira and Seminars
- Python, PyTest, Git, JIRA, BitBucket, SimPy and Gurobi

PERSONAL PROJECTS

NLP Beverage Classifier with React Frontend

🧠 TF Keras Serverless Pipelines Docker React

Links: Source Demo

Marvel Site

React.js Styled Components Bootstrap

Links: Source Demo

COVID-19 Data Analysis and Modelling

Python (Pandas, Scipy, Numpy)

Links: Jupyter Notebook Research Paper

Peer-to-Peer Blockchain

Java Git

Link: Source

BikeRadar: Share Bike Aggregation

React Native JavaScript Git

Links: iOS App Store Android Play Store

Wild West Zombie Mobile Game

Unity3D .NET C#

Link: YouTube

SKILLS

Languages

Java Python JavaScript C/C++
CSS HTML PostgreSQL Bash C#
R Lisp Haskell MySQL PHP Prolog

Specialities

Algorithms Data Structures IT
Data Analysis Machine Learning
OOP Distributed Systems Linux

Frameworks & Libraries

Node.js React.js React Native Antlr
Pandas Keras Tensorflow Styled

Cloud Technologies

Azure AWS Serverless RDS Firebase
Supabase Lambda Cloud Watch S3

Testing Frameworks & Project Management

Cypress Storybook PyTest JUnit
Sentry Clickup

DevOps

Docker Git Jira BitBucket Pipelines

Quantitative Finance

Stochastic Processes Statistics
Linear Modelling Financial Derivatives

EDUCATION

BSc (Computer Science, Financial Maths)

The University of Sydney

📅 Graduated July 2020 | WAM: 83.9

BEng (Mechanical Engineering) (Hons)

The University of Sydney

📅 Graduated July 2020 | WAM: 83.9

REFEREES

Eddie Lim - Tech Lead

@ Metigy

✉ eddie.lim@metigy.com.au

Brittany Crocker - Junior Engineer

@ Metigy

✉ brittany.crocker@metigy.com.au