JOSEPH HODGES

Software | AI/ML Engineer

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Meticulous Machine Learning and Software Engineer with demonstrated success in identifying relationships and building solutions to business problems.

LANGUAGES

Proficient:
Python | Bash | Java

Experienced:
Ansible | Docker | SQL | C++ | C#

Familiar:
Go | Ruby | F# | JS/TS

Frameworks:
Flutter | React | .NET

EDUCATION

BEng Software
Victoria University of Wellington

2019 – 2023 Wellington, NZ

- GPA: 3.7
- Specialising in AI/ML

EXPERIENCE

Machine Learning Engineer | StayInFront

08 2023 – Now

- Developed and maintained a variety of of the shelf and bespoke Machine Learning (ML) products on multi cloud infrastructure
- Working with Reinforcement Learning (RL) as well as more traditional ML algorithms across Computer Vision (CV) projects and more data driven solutions, in some cases improving model accuracy by up to 12%.
- Studied new technologies and prototyped ML applications to quickly determine application viability, findings to non-technical stakeholders.
- Transformed raw data to conform to assumptions of machine learning algorithms.
- Spearheaded the development of a company-wide data strategy, driving better utilization of data resources across departments for improved business outcomes.

Software Developer | New Zealand Stock Exchange (NZX)

11 2021 – 07 2023

- Designed, Implemented and Supported CI/CD pipelines, improving code quality by up to 40% organization wide.
- Migrated legacy systems and updated code bases to modern platforms and standards.
- Oracle and Postgres Database management
- Mentored 3 junior developers to improve their technical skills, fostering a culture of continuous learning within the team.

Junior Developer | Qontro

02 2021 – 11 2021

- Redesigned internal helpdesk system to integrate with external CRM which involved building an internal API and CLI in python.
- Led an Agile team of 3 and liaised with project stakeholders

PROJECTS

Genetic Algorithms for Community Detection in Social Networks | | |

- Investigated existing Community detection approaches, and identified issues
- Developed and Implemented a GA with local search to identify communities in social networks
- Tested across large datasets and presented findings in research paper

Exploratory Data Analysis (EDA) and Machine Learning for pattern recognition and prediction | | |

- Used Seaborn to better understand data and business problems present in a given dataset
- Implemented machine learning solutions to these problems using the Scikit Learn library and other data science techniques
- Evaluated baseline model against more advanced techniques

Image Classification and Pattern Recognition using CNN |

- Deep Learning Algorithms using libraries like Pytorch, Keras, and Tensorflow to identify different types of fruits
- Improved model performance through a variety of techniques such as hyper parameter tuning and transfer learning

Hobbies: Rock Climbing, Weight Training, Running, Music, Event Organising