Matthew Burke

Experience

Wavebridge - Fintech Startup in Seoul

Quant Developer

Mar 2022 - Jan 2023

- Developed, quality tested and productionized trading strategies based on multivariate statistics
- Introduced application monitoring and CI processes which increased uptime from 90% to 98%
- Profiled and fine-tuned code which lead to a magnitude speed up in development processes
- Presented our systems technical capabilities to investors as a lead up to receiving Series B funding

IBM

Data Scientist

Mar 2019 – Mar 2022

Member of the 'AI & Cognitive' practice

- Maintained a virtual assistant that featured on the home page of a large government organisation to provide dynamic information about the coronavirus pandemic and associated workplace changes
- Created and maintained a tailored search engine application for internal documentation, the project was later expanded with additional funding
- o Developed a data cleaning pipeline to process natural language documents for a Question & Answer system
- Wrote unit, system and functional tests to prevent any regression on a custom component of the Q&A system
- Wrote system architecture documents including network, functional and security views

Reserve Bank of Australia

Data Analyst

May 2018 - Feb 2019

- o Developed an information retrieval system to standardise the names of mislabelled time series
- Modernized the 'Index of Commodity Prices' public data release so as to be a database based system
- Designed and implemented a static site generator for automated reporting and graph generation which was viewed by the Governor of the RBA after each new data release

Data61

Intern

Aug 2017 - Oct 2017

Used machine learning to predict parking space occupancy rate

Conducted feature engineering and implemented an XGBoost model to predict parking occupancy rates

Skills

Tools: Python, Java, Docker, Node, SQL, Machine Learning, PyTorch, Korean language fluency

Roles: Data Scientist, Software Developer, DevOps, Quant

Education

Macquarie University

B.S. Physics

Mar 2014 - Nov 2017

Korea University

B.S. Physics (Exchange)

Mar 2017 - July 2017