MING FONG

in linkedin.com/in/mingfong   ✉ mingfong@berkeley.edu   ⓖ github.com/evilpegasus

EDUCATION

University of California, Berkeley June 2020 – May 2024

Bachelor of Arts, Physics and Computer Science *Berkeley, CA*

Cumulative GPA: 3.824

Coursework: Machine Learning, Neural Networks, Discrete Math, Probability, Linear Algebra, Data Structures

Activities: Traders at Berkeley, Student Association for Applied Statistics (SAAS), Capital Investments at Berkeley

EXPERIENCE

DeepMind Technologies Ltd. Fall 2022

Incoming Core Research Engineering Intern *London, UK*

Two Sigma Investments, LP Summer 2022

Incoming Quantitative Research Intern *New York City, NY*

Lawrence Berkeley National Laboratory January 2021 – Present

Machine Learning Researcher *Berkeley, CA*

Deep learning for pion reconstruction in particle physics collision events in collaboration with the CERN ATLAS group

Applied graph neural networks and data engineering to high dimensional data to improve network learning efficiency

Discovered models for classification of pions with 5x better background rejection than traditional hand-tuned models

Voloridge Investment Management, LLC May 2021 – August 2021

Quantitative Research Intern *Jupiter, FL*

Portfolio holdings inference of non-transparent funds using statistical and machine learning methods

Reduced dimensionality of securities universe tenfold using correlations, regressions, and feature selection techniques

Limited turnover and applied portfolio constraints via modified Lasso, Ridge, and other regression regularizations

AI Dynamics Inc. August 2020 – January 2021

Software Engineering Intern *Bellevue, WA*

Developed a Python framework to deploy proprietary data modeling software to AWS EC2 using the Boto3 API

Saved 8+ hours per build iteration by automating the entire testing pipeline for the NeoPulse API on AWS Instances

Microsoft Corporation June 2019 – August 2019

Software Engineering Intern *Redmond, WA*

Developed an internal desktop application for the Windows Data Science team with 50+ users using C# and XAML

Designed and maintained backend SQL database tables and implemented queries and REST API endpoints

PROJECTS

Two Sigma Halite AI Programming Challenge

Bronze Medal: Ranked in the top 6% out of 1138 submissions on the global Kaggle leaderboard

Implemented creative algorithmic policies in a Python agent to compete in the Halite IV simulation environment

Google Trends Financial Modeling

Used Google Trends data to predict ETF price movements, earning 42% returns per annum in backtesting

Implemented EDA, feature engineering, modeling, and backtesting in Python with Pandas, Scikit-learn, NumPy

Berkeley SAAS Data Science Consulting

Orbital Insight - Missing object interpolation for cloudy satalite imagery using geospatial and time-series techniques

ProducePay - Feature importance analysis and predictions for terminal and shipping price quotes of produce

Berkeley Trading Competition

Planned and moderated Traders at Berkeley's first 100-contestant West Coast Trading Competition

Developed 2 turn-based market making games with a Python Flask backend and ReactJS frontend

Citadel West Coast Regional Datathon

Modeled the effect of non-pharmaceutical interventions on COVID-19 reproduction rates in 31 European countries

SKILLS

Software Languages	Python, R, Java, C#, SQL, HTML/CSS/JavaScript
Tools	NumPy, Pandas, Scipy, Sklearn, Jupyter, Linux, Windows, VS Code, Git
Interests	Table Tennis, Tennis, Cycling, Badminton