

MING FONG

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github.com/evilpegasus

EDUCATION

University of California, Berkeley

June 2020 – May 2023

Bachelor of Arts, Physics and Computer Science

Berkeley, CA

Cumulative GPA: 3.967

Coursework: Data Structures and Algorithms, Discrete Math, Probability, Multivariable Calculus, Linear Algebra

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

EXPERIENCE

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

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 satellite 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

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

Berkeley SAAS Kaggle Competition

1st place solution in the Fall 2020 Berkeley Student Association for Applied Statistics internal Kaggle competition

Predicted 2017 NYC real estate sale prices using a Keras feedforward neural network in Python

SKILLS

Software Languages

Python, R, Java, C#, SQL, HTML/CSS/JavaScript

Tools

Jupyter, Linux, Windows, VS Code, Git

Interests

Table Tennis, Tennis, Cycling, Badminton