

Mason Choi

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EDUCATION

University of Massachusetts Amherst

Amherst, MA

Bachelor of Science Dual Degree in Computer Science and Mathematics, GPA: 3.95

Sep. 2023 – May 2025

Skills: Python, Java, Linux, SQL, Data Processing, Advanced Statistics, Linear Algebra, Numerical Analysis

EXPERIENCE

Lead Software Engineer

April 2024 – Present

AI Stealth Startup

Weston, MA

- Configuring company GCP servers to handle large streams of financial data
- Deploying advanced forecasting models to extract insights from historical data

Head of Quantitative Finance

June 2024 – Present

Minutemen Alternative Investment Fund

Amherst, MA

- Training and overseeing the quant arm through algorithm development and fund pitches

Quantitative Researcher

Feb 2024 - June 2024

- Led an options trading team to implement live gamma scalping algorithms generating over 45% in returns YTD

Data Engineer

June 2023 – April 2024

Atlantic Prime Estates LLC

Winchester, MA

- Built advanced housing data aggregation pipelines to push data into AWS-hosted MySQL databases
- Compared multiple regression and time series models to more accurately predict appreciation rates

Software Engineer

March 2022 – June 2023

Solve Advisors Inc.

New York, NY

- Automated manual bond and loan data pricing with Selenium and Google OAuth2 in AWS EC2 instances
- Collaborated with AI/ML team to develop a US Securities and Exchange Commission (SEC) BDC parser with Python web scraping, saving the company an estimated 848 hours annually

Data Engineer

September 2021 – March 2022

Advantage Data Inc.

Boston, MA

- Deployed ETL pipelines on government-collected financial data into the company's Google BigQuery database
- Developed Python scripts to direct source data into MySQL databases with Python and SQL

PROJECTS

Text2Notes | *Python, Flask, NLP, OpenAI, PostgreSQL*

Dec 2022 – May 2023

- Automated text segmentation and prompt engineering using regex and tokenization techniques
- Leveraged OpenAI APIs to condense text into summaries in real time
- Attracted an average of over 100 users and 450 queries daily

Files | *Python, JavaScript, Flask, AWS S3, Google OAuth, Stripe, MySQL, SQLAlchemy*

March 2022 – April 2023

- Hosted user files in AWS S3 cloud storage for quick uploads, downloads, and viewing
- Stored user account information in Heroku hosted MySQL database using the SQLAlchemy ORM
- Grew to over 250 active users totalling over 200 GB of stored files

Anchor-AI | *Python, JavaScript, TensorFlow, Django, MySQL, AWS S3, AWS EC2*

May 2021 – October 2021

- Manipulated price data from stock symbols with NumPy and Pandas to develop multiple regression models using Google's TensorFlow library
- Utilized AWS S3 Storage to store trained weights and Matplotlib analysis graphs, and utilized AWS Elastic Cloud Compute Instances to train models in the cloud with Linux Cron jobs

RESEARCH

VITON: Working with researchers at the Korea Institute of Advanced Science and Technology (KAIST) to develop a virtual clothing try-on network for commercial use

Gamma Scalping: Developed a delta hedging algorithm to leverage option volatility and momentum with a team of student quantitative traders and researchers