Mason Choi

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EDUCATION

- Current <u>senior</u> at the University of Massachusetts Amherst, 3.95 GPA
- Dual Degree in Computer Science (BS) and Mathematics (BS) with a concentration in Data Science
- Machine Learning (CS 589) University of Massachusetts Amherst ~A
- Principles of Big Data Processing (CSCI E-88) Harvard Extension School A

Work Experience

Al Stealth Startup

(April 2024 - Present)

Lead Software Engineer

• Configuring company servers to handle large streams of financial data and deploying machine learning models to extract insights from them.

Atlantic Prime Estates LLC

(June 2023 - April 2024)

Data Engineer Contract, Head of Data

- Built advanced housing data aggregation pipelines to push exclusive API data into AWS hosted MySQL databases for later mathematical analysis
- Compared multiple regression and time series models to more accurately predict appreciation rates, building out the fund's most valuable market analysis tool

Solve Advisors Inc.

(March 2022 - June 2023)

Developer/Analyst, Junior Data Engineer

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

Advantage Data Inc.

(September 2021 - March 2022)

Junior Data Engineer

- Developed Python scripts to scrape, parse, transform, and load government collected financial data into the company's Google BigQuery database (ETL process), replacing hundreds of hours of manual work
- Worked with development team to deploy data pipelines directing source data into our system with Python and SQL

Skills

- Languages: Python, Java, SQL
- Libraries: TensorFlow, Requests, NumPy, Matplotlib, Pandas
- Frameworks: React, Flask, Django, React Native
- Tools: AWS, Git, Docker, Hadoop, Spark, Microsoft/Google suites

PROJECTS

Stock Market Analysis Website (Anchor-Al)

(Python, JavaScript, TensorFlow, Django, MySQL, AWS S3 Storage, AWS EC2 Computing)

- 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

SaaS File Sharing Platform (filess.org, deprecated)

(Python, JavaScript, Flask, AWS S3 Storage, Google OAuth, Stripe API, MySQL, SQLAlchemy)

- 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