Mason Choi

choi.mason@gmail.com | masonchoi.net | linkedin.com/in/masonchoi | github.com/Tennis-Ball

EDUCATION

- Current junior by credits at the University of Massachusetts Amherst, 4.0 GPA
- Dual Degree in Computer Science (BS) and Mathematics with a concentration in Data Science (BS)
- Database Systems (CSCI E-66) <u>Harvard Extension School</u> ~95.00% 4 credits
- Principles of Big Data Processing (CSCI E-88) <u>Harvard Extension School</u> 100.00% 4 credits

WORK EXPERIENCE

Atlantic Prime Estates

(June 2023-Present)

Data Engineer Contract/Head of Data

- Building advanced housing data aggregation pipelines to push exclusive API data into AWS hosted MySQL databases for later mathematical analysis
- Comparing 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 Al/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

Software

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

PROJECTS

SaaS File Sharing Platform (filess.org, deprecated)

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

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

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