Maggie Yan

Baruch College – MS Accounting and MS Finance

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SKILLS

AWS (S3, EMR, Lambda, Athena, EC2, Cloudwatch), PostgreSQL, Apache Airflow, Containers, Distributed Systems, Python, Golang, Java

EXPERIENCE

Software Engineer - Amazon   *July 2022 - Present*

- Saved $48k/yr in AWS infrastructure cost by reducing the EMR cores from 80 to 20 while improving data processing time. Optimized data partitioning to eliminate unnecessary duplication, calculation and shuffling.
- Achieved 10x acceleration of the production data pipeline by optimizing Spark memory allocations, reducing runtime from 11 hours to just 1 hour.
- Led design and implementation of World Wide, scaling out Search widget from 1 to 21 marketplaces each supporting multiple languages.
- Owned running project to A/B test multiple datasets across four Amazon.com shopping pages, optimizing the customer purchasing journey using visual navigation experiences powered by datasets I generated.
- Automated code review descriptions and implemented format checks to increase quality of code reviews.

Software Engineer (promoted in 7 months) - Better.com   *July 2021 - June 2022*

- Built an industry-leading mortgage pricing engine in 6 months with the team. Owner of the price lock management backend system. The engine is 10x faster than the best alternative in the market and provides 100x more serving capacity with moderate resource usage.
- Made tools to automate parity testing of complex price adjustments and eligibility rules between 3P SaaS and new systems. Reduced report turnaround time from days to minutes.
- Led data quality improvement effort for the pricing engine, driving the team to improve data quality. Precision was formerly stalled at 50% for 3-months with 5 engineers and product managers working to improve it. Upon leading the data quality effort, I helped the team drive precision from 50% to 95% within one month.
- Leveraged AWS infrastructure and products to streamline product deployment and debugging.
- On-call rotation to investigate and resolve live incidents and ensure product reliability.
- Learned Golang quickly through books and online training, becoming proficient after two weeks.

Volunteer Software Engineer - Africa Marine Mammal Conservation Organization   *April 2021 - July 2021*
part-time: July 2021 - present

- Designed and built test suites for a database migration.
- Improved existing citizen science platform by adding new full-stack components for image sharing using Symfony.
- Built mobile UI using flutter, to help scientists crowdsource images from fishermen to monitor endangered turtles.

Personal Projects

Pintellect (Ruby on Rails, ReactJS, Redux)
An online visual discovery engine inspired by Pinterest and my love of art and science.   demo | github

- Handled data validation and user authentication on the backend.
- Implemented custom search algorithms using Rails Active Record as well as Redux state, allowing users to filter for specific boards and save pins to them.

Menutube (AWS, MongoDB, Mongoose, Express.js, ReactJS, Node.js)   live | github
A video sharing platform that allows users to plan their meals based on nutrition needs, dietary preference and ingredients on hand.

- Led the team to complete UI styling and design while maintaining consistency across all site elements.
- Designed an algorithm in the backend, allowing the frontend to send one request querying data from multiple models.
- Implemented a multipurpose React Component using the Drag and Drop API to integrate content with a meal-planning calendar interface.
- Hosted video content on AWS and indexed video S3 URLs in MongoDB for easy retrieval.