Matthew McBrien

Software Engineer

LinkedIn

Personal Website

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About

Driven and focused software engineer looking to use my knowledge and experience to design, develop, and deploy large distributed systems that have high impact on customers. Multiple years of experience building and maintaining one of the largest compute platforms in the world at AWS Lambda.

Education

M.S.

Electrical and Computer Engineering Georgia Institute of Technology 2019-2020

B.S.

Computer Engineering Georgia Institute of Technology 2015-2018

Skills

Java Python Typescript AWS Bash Git

Interests

Reading Fitness Division I Track Athlete

Work Experience

Amazon.com

Software Development Engineer II - Global Functions

Jul 2023 - Present

- Owned development of new Java-based runtime. Launched runtime as part of a larger product under beta release in April of 2024 and to all internal customers in June of 2024.
- Oversaw design decisions and worked with junior engineers on features related to observability, deployments, and scaling.
- Took ownership of general testing plan for release as well as documentation and tooling improvements within the team. Drafted, edited, and published entirety of public documentation for launch of new product.

Software Development Engineer II - AWS Lambda Software Development Engineer I - AWS Lambda Nov 2021 - Jul 2023 Jul 2020 - Nov 2021

- Led roll out of and migration to new service that supports millions of transactions per second worldwide. New service has led to utilization, availability and agility wins, including reducing worldwide deployment time by two weeks.
- Integrated with new internal dependency that was unusable by the Lambda team previously due to deployment restrictions. Work has been used across multiple internal teams to achieve the same result.
- Researched and successfully rolled out new internal back-off mechanism that solves noisy neighbor issue. Project led to a complete elimination of the most common customer pain point.
- Designed and implemented update to control plane mechanism that reduced customer-perceived latency by 30 seconds. Work was expanded and reused across three control plane services in Lambda.

United Technologies Corporation - Predikto Team

Part-Time Software Engineer

Dec 2019 - May 2020

- Worked across QA and development teams to redesign testing architecture in workflow. Redesign allowed developers to more quickly integrate with the testing workflow and reduced dev time.
- Collaborated with data science and leadership to develop internal mechanism for delivering real time test results, increasing speed of reporting issues by 50%.

Georgia Institute of Technology - ECE

Graduate Teaching Assistant

Jan 2019 - Dec 2019

- Spring 2019 Dr. Conte's Advanced Computer Architecture: Designed C++
 projects that cemented concepts such as caching, superscalar design, and
 cache coherency.
- Fall 2019 Dr. Hamblen's Embedded Systems Design Lab: Ran embedded systems lab, aided in implementation of students' labs and guided final design projects.

Personal Projects

 Enjoy writing and reading about a wide-range of topics. Some from my website include a discussion of the Monty Hall Problem and the K Nearest Neighbors algorithm.