Matthew R. McBrien

— mrmcbrien@gmail.com — mmcbrien.com — U.S. Citizen

OBJECTIVE

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

Georgia Institute of Technology — Atlanta, GA
Master of Science, Electrical and Computer Engineering — May 2020

Georgia Institute of Technology — Atlanta, GA
Bachelor of Science, Computer Engineering — December 2018

- G.P.A. 3.97/4.0
- Graduated with Highest Honors

EXPERIENCE

Amazon Web Services - Lambda — Seattle, WA
Software Development Engineer II — Sep 2021 - Present
Software Development Engineer I — Jul 2020 - Sep 2021

- Led rollout for new service supporting all Lambda asynchronous invocations. New service drove agility, utilization, and availability wins across multiple Lambda services.
- Designed and implemented back-off mechanism to reduce noisy neighbor pain point in asynchronous invocation architecture.
- Researched and rolled-out improvement to Lambda control plane, reducing customer-experienced latency by 30+ seconds.
- Drove operational improvements for team in tooling, deployments, and monitoring.

United Technologies Corporation - Predikto — Atlanta, GA
QA Engineer — Jan 2020 - May 2020

- Wrote test code for new features of data science application and expanded tests to ensure stability of ML deployments.
- Created daily report of test results running in AWS to increase transparency.

Amazon Web Services - Lambda — Seattle, WA
Software Development Engineer Intern — Summer 2018 & Summer 2019

- Prototyped and designed new architecture that allows for polled events to be propagated to other AWS destinations.
- Upgraded internal AWS Lambda architecture to reduce latency for customers when creating new event source mappings for stream-based event sources.
- Created system for measuring customer-centric latency which showed a 91% reduction as a result of new architecture.

Georgia Institute of Technology - ECE — Atlanta, GA
Graduate Teaching Assistant — Spring & Fall 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 students' designs.

SKILLS

Languages - Java, Python, Typescript, GoLang, Bash
Tools and Frameworks - AWS (Lambda, DynamoDB, S3, EC2, ALB, etc.), CDK, Guice, Spring
Relevant Graduate Courses - Computer Network Security, Statistical Machine Learning, Digital Speech Processing

INTERESTS

Running

- NCAA Division I Cross Country and Track & Field athlete for Georgia Tech.

Game Design

- Designed games using GameMaker, PyGame, and Javascript.
- My first Javascript game is live on my website.

Reading

- Ask me about *Infinite Jest*!