

# Matthew McBrien

Software Engineer

## Links

[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  
2018-2020

*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 Web Services - AWS Lambda

*Software Development Engineer II*

*2020 - Present*

- Led roll out of and migration to new service that supports more than 3 million 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.
- Led team on driving improvements in tooling, deployments, and internal documentation. Changes included updates to development stack testing that reduced onboarding time by 60% and cost by 80%.

## United Technologies Corporation - Predikto Team

*Software Engineer*

*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*

*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

- [Monty Hall Exploration](#) - Wrote essay exploring Monty Hall problem – using Java to experiment in problem space and Python for data visualization.
- [Cube Hunt JS](#) - Created 2d arcade game using pure JS that hosts global high scores using DynamoDB and Lambda.