

Marcus N. Hill

✉ marcus@marcusnhill.com | 🏠 blog.marcusnhill.com | 📧 marcushill | 📺 marcushill12 | 📞 +1 (205) 219-1462

Summary

Current Software Engineer II at Microsoft. 2+ years full-time experience building and successfully launching web-based systems. Additional 3 years of part-time experience building and maintaining production systems while in college.

Looking to transition to more backend/systems focused roles. Ideally working on a product team.

Work Experience

Microsoft

Redmond, WA

SOFTWARE ENGINEER I & II

July 2018 – Present

- **Stack: Node.js, Docker, Azure Functions, Azure SQL, CosmosDB (Gremlin), Angular, C#**
- Developed and brought to production a contract management system that allowed us to retire a 25+-year-old legacy solution. This solution is in the critical path for billing and entitlement of Microsoft's highest-tier support contracts and processes billions of dollars annually.
- Promoted after 13 months for work done on stabilizing our new agreement management system before, during, and immediately after release.
- Drove performance and cost reduction improvements. Measured by halving our database spend and bringing APIs within SLOs.
- Built the CI/CD pipeline for our system and planned the deployment configuration for our Azure App Services.
- Designed and implemented HTTP APIs using Node.js, Azure SQL, and CosmosDB to support downstream API consumers across 12+ teams.
- Collaborated with our API consumers to help them improve their response time and overall user experience.
- Acted as DRI (on-call engineer) and debugged/solved numerous customer problems across system and organizational boundaries.
- Partnered with project management and business stakeholders to define requirements for future work.

IBM

Research Triangle Park, NC

SOFTWARE ENGINEER

June 2017 – July 2018

- **Stack: Node.js, Docker, Kubernetes, Redis w/ Lua Integration, CloudantDB, MongoDB, RabbitMQ**
- Architected Slack app for high availability that would scale to 100,000 users.
- Designed data anonymity scheme making it impossible for service operators to access application data.
- Optimized server costs by reducing microservice RAM usage from 8 GB to under 1.5 GB on production load.
- Partnered with team lead to migrate our six services from Cloud Foundry to Kubernetes.
- Maintained Node.js microservices built on Seneca.js and RabbitMQ.
- Delivered internal conference talks on continuous integration and delivery and git fundamentals.

IBM

Research Triangle Park, NC

EXTREME BLUE TECHNICAL INTERN

Summer 2016

- **Stack: Node.js, Python, Cloud Foundry**
- Architected and implemented an AI-powered Slackbot on top of public Watson services to assist engineers while investigating outages.
- Led bi-weekly meetings with stakeholders to present findings, demo progress, and plan future work.
- Delivered a weekly four-minute pitch to executives with the two other technical interns and one MBA candidate.

ADTRAN Inc.

Huntsville, AL

CO-OP ENGINEER

Fall 2014, Summer 2015, Spring 2016

- **Stack: Python, AngularJS**
- Communicated with and supported twenty developers on multi-national teams in developing applications on top of the platform.
- Developed a UI platform for the company's next-generation management tool using AngularJS
- Balanced designs produced by user experience specialists with impending customer deadlines, frequently with turnaround times as short as a week.
- Led two company-wide hackathon projects with other co-op students.

Center for Advanced Public Safety

Tuscaloosa, AL

SOFTWARE DEVELOPER

Summer 2014, Spring 2015, Fall 2015

- **Stack: C#, ASP.NET MVC, Windows Presentation Foundation**
- Maintained C#-based Windows Presentation Foundation applications used by police officers in multiple states for issuing citations and other reports.
- Acted as the primary developer maintaining an overtime reporting system for Alabama police departments using ASP.NET MVC and jQuery.
- Implemented the user and asset administration portion of a national fire incident reporting system.
- Designed relational data models for various projects using SQL Server.

Education

University of Alabama

Tuscaloosa, AL

B.S. IN COMPUTER SCIENCE, MINOR MATHEMATICS

August 2013 - May 2017

- Graduated Summa Cum Laude