Peyton Howell

404-528-7875 | peytonhowelle@gmail.com | linkedin.com/in/peytonhowell peytonhowell.com

EDUCATION

Georgia Institute of Technology   Atlanta, GA
Bachelor of Science in Computer Science | 4.0 GPA   *May 2019 – Dec. 2021*

EXPERIENCE

Software Engineer 2   Jan. 2022 – Present
Microsoft, Azure Core   *Atlanta, GA*
- Designed and implemented data-center safety platform integrating Attribute based access control (ABAC) used by team of > 50 engineers to intercept and validate the safety of over 160,000,000 operation preventing $> 50,000$ operations per year that would otherwise have caused customer VM interruptions
- Operationalized distributed system for safety platform, adding comprehensive monitoring and emissions, resulting in the service being available $> 99.9\%$ with a 100ms p99 SLA
- Reduced p99 latency of safety platform by $> 99\%$ from initial approach to around 5ms by employing a caching mechanism, an optimal attribute fetching algorithm, and simplifying the architecture from requiring 3 (on average) API calls to 1
- Collaborated across 5 different teams to remove the direct usage of device credentials as part of a high severity security incident (CVP visibility), assisting teams by identifying and building alternative
- Designed and developed key checks needed for data migration from legacy datacenter inventory system to a new distributed microservice, contributing to an approximately 90% reduction in compute resources usage
- Reduced on-call work by over 15 hours (30 incidents) per month by developing automated triage and enrichment for common classes of incidents

Software Development Engineer (Intern)   May 2021 – August 2021
Amazon, Halo Health Tech   *Seattle, Washington (Remote)*
- Designed a performance and accuracy testing platform for machine learning models on mobile devices
- Developed an Android application in Kotlin to measure runtime performance of ML models
- Automated performance tests across multiple mobile devices using AWS Lambda, S3, Device Farm, DynamoDB, and other services; calculated accuracy related metrics in Python as part of this platform
- Created a dashboard to track performance across different ML Models, device models, and data sets

Software Engineer (Intern)   June 2020 – May 2021
J.B. Hunt Transportation Services   *Fayetteville, AR (Remote)*
- Improved stability of an essential Java Spring Boot webservice by refactoring and writing unit and integration tests using Junits and Mockito
- Created a dynamic MSSQL query creator in Java to allow more complex searching with JDBC
- Developed internal interview management tool with Angular (TypeScript, HTML, SCSS) using PrimeNG, and interfacing with services using RxJS
- Developed an auditing feature for interview management tool in a Spring Boot webservice
- Improved latency of most used endpoints on a Spring Boot API by over 80% by implementing cache
- Migrated interview application from Microsoft Azure to Google Cloud Platform

PROJECTS

Android Team Awareness Kit (ATAK) Timeline Coordination Plugin | *Android Studio, Java*
- Created a plugin to allow the 75th Ranger Regiment to manage multiple concurrent timelines
- Utilized the ATAK framework in Android to create a plugin using Java consistent with the ATAK app while maintaining performance and developing features based on user research

TECHNICAL SKILLS

Languages: C#, Java, Python, HTML, CSS, JavaScript, TypeScript, Kotlin, SQL, C
Frameworks: Spring Boot, .NET, Angular, Flask, JDBC, React
Developer Tools: Git, Postman, IntelliJ, AWS CDK, AWS SDK, Kubernetes, Docker, Jira, Azure DevOps, vim, VS Code, Visual Studio