Waffy Ahmed

Lilburn, GA | 404-740-7870 | waffyahmed@gmail.com | https://www.linkedin.com/in/wa24/ | https://waffy.netlify.app/

Education

Georgia Institute of Technology | Atlanta, GA — December 2024
Bachelor of Science in Computer Science — Faculty Honors, Dean's List, Zell Miller Scholar

Experience

Software Engineer — January 2025 – Present
The Home Depot — *Atlanta, GA*

- Automated Spinnaker deployment pipelines for 10+ microservices with cdk8s, utilizing TypeScript, Terraform, and Google Cloud Platform for production and non-production environments, reducing deployment times by 25%.
- Implemented tiered alerting and configured Grafana dashboards for 20+ microservices, providing real-time visibility into system health and performance metrics, along with leveraging Slack for routine notifications/warnings and PagerDuty for critical issues, reducing acknowledgement time for alerts by 15%.
- Resolved critical transaction processing issues across 500+ stores, collaborating with cross-functional teams and leveraging Cassandra, Elasticsearch, Java, BigQuery and Postman to maintain ∼100% service availability.
- Led testing and validation efforts for enabling/disabling a legacy service using BigQuery and Postman, reducing CPU usage for booking transactions by ∼25% and ensuring seamless functionality during its phased retirement.
- Boosted store transaction lookup speeds by ∼10% via implementation of a new indexing mechanism in Java.

Software Engineer Intern — May 2023 – July 2023, May 2024 – July 2024
The Home Depot — *Atlanta, GA*

- Developed an internal product information page for cashiers, streamlining self-checkout processes and reducing customer wait times for associate interventions by ∼25%.
- Leveraged Java to obtain germane product data, used React and TypeScript to effectively display product information for all registers at self-checkout, pruning customer theft by ∼$10 million annually.
- Optimized the efficiency of configuring 40,000+ registers across 2,300 stores by 90%, in collaboration with 2 interns.
- Truncated the maximum deployment time of updates to registers from 24+ hours to 30 minutes, leveraging the HttpClient and Flow Java libraries to streamline the retrieval of polymorphic external configurations.
- Collaborated with cross-functional teams, including the UI/UX team, designing and constructing user interface components for a new configuration process - utilizing React, Next.js, and TypeScript.

Firmware Engineer Intern — May 2022 – August 2022
Landis+Gyr — *Alpharetta, GA*

- Accelerated the process of converting DCW (Data Control Words) hexadecimal values to their corresponding ASCII representations by ∼50% through efficient Python practices.
- Bolstered data transmission efficiency by ∼25%, collaborating with a software architect to conduct comprehensive testing of collectors and debugging of various Python scripts employing MySQL.

Projects

CDC Data Reconciliation | *Python, FastAPI, SQLite, React, Tailwind CSS*

- Oversaw a team of 6 to automate the reconciliation of case counts for infectious diseases between 50 state health departments and the CDC, alongside doubling as a full-stack software developer.
- Utilized Python to compare state health department and CDC data, highlighting any discrepancies between the two datasets, saving 5000+ hours of manual reconciliation annually.
- Procured feedback from CDC computer scientists and representatives from 25+ state health departments via application demonstrations and integrated the suggested modifications.

Job Search Aid | *Kotlin, Google Firebase, Cloud Firestore, Adzuna API, XML*

- Engineered an Android application to aid job seekers by providing resources such as FAQs, resume templates, etc.
- Integrated the Adzuna API using Kotlin to fetch jobs based on user preferences of job title, location, and radius.

Skills

Languages: Java, C#, C++, C, Python, Kotlin, JavaScript, TypeScript, HTML, CSS
Technologies/Frameworks: SQLite, Cassandra, Elastic Search, BigQuery, Google Firebase, React, React Native, Node.js, Next.js, Express, Postman, Docker, Git, JUnit, Jest, Kubernetes, GCP, Terraform, PromQL
Concepts: Object-Oriented Programming & Design, Data Structures & Algorithms, Test-Driven Development, NoSQL, SQL, Game AI, Backend, Frontend, Agile, Scrum, Data Visualization/Analysis, Human-Computer Interaction, Computer Architectures & Graphics, Video Game Design, CI/CD, Applied Combinatorics, Web/Mobile Application Development