Tyler J. Roberts

(262) 388-4050 | tjroberts314@gmail.com | https://www.linkedin.com/in/tyleroberts | https://github.com/tyler314

Summary

Software engineer with 5+ years experience in development and design. Most of my recent work has been focused on building backend systems, including but not limited to infrastructure, APIs and microservices, and client/server systems; including the development of the frontend client side.

Experience

Amazon.com, Inc., Seattle, WA   Dec. 2019 - Present
Software Development Engineer, Alexa Identity & Personality

- Work on the Alexa Content Management System (ACMS) used by content creators to author Alexa responses. As well as the Adaptive Response Management System (ARMS), a real time service responsible for filtering and selecting content to be served to our customers, with a tps of over 10k and a maximum latency of 200 ms.
- Lead engineer in delivering adapted responses for Smart Home requests. Such features include sharing insights to customers who make a bad request, listing device capabilities of the requested device, and having Alexa say "Good Morning / Night" when a smart light is turned on or off, depending on time of day.
- Developed a Brief / Verbose Mode for ACMS. This allowed the authoring of responses targeted to customers who have their Alexa devices' brief mode setting turned on, as well as to those who have it turned off. Developed the setting on the frontend, worked with internal 3P teams to read the brief mode setting from Alexa customers and ingested it into ARMS, and developed filtering logic to serve the correct responses based on individual requests.
- Migrated all of Alexa personality content from the old content management system, to ACMS/ARMS. This was a three month endeavor that required the development of bulk migration scripts, working closely with a select few engineers, PMs, and content creators across all supported locales. Had daily standups just for this project.
- Led our org in hiring software development engineers by conducting over 50 interviews in Q1 2022. This allowed our org to get a higher head count for engineers we were allowed to hire. I received our orgs quarterly award for this effort.
- *Tools & Technologies: AWS stack, Kotlin, Javascript, React Framework, Git.*

Cockroach Labs, New York, NY   May 2019 - Sep. 2019
Software Engineer, Bulk I/O

- Apart of the Bulk I/O team, which is responsible for bulk operations in the database, including backup and restore, and schema changes in the database.
- Fixed issue where the dump operation would include interleaved table statements inside of create table statements, causing dependency issues upon a restore.
- Designed features for the backup & restore process to include additional metadata about the cluster. Required a redesign of how the process worked, and reduced manual steps by the user.
- *Tools & Technologies: Golang, SQL, Git/Github.*

Dataminr, New York, NY   September 2018 - February 2019
Software Engineer, Content Search

- Work on developing the tools used to search and filter through the Twitter pipeline and other media sources.
- JVM code base comprised of Scala and Java. Applications ran on AWS, and much of the day to day work involved use with the AWS tech stack. Kinesis was used for processing the large data sources, where S3 was used to store the raw data.
- Migrated Pastebin data source from Kinesis to Kafka. Involved dependencies between several teams, and required collaboration amongst them.
- *Tools & Technologies: Scala, Java, Maven, Docker, AWS, Google Guice, Git/Gitlab, IntelliJ, MacOS.*

Education

B.S. Computer Engineering, Computer Science, & Mathematics with Physics Certificate (minor).
University of Wisconsin - Madison, May 2017