Tyler Roberts

(262) 388-4050 | tjroberts314@gmail.com | https://www.linkedin.com/in/tyleroberts | http://tyler.engineering

Summary

Enthusiastic computer engineer with 4+ years experience in software development and design. Most recently I've had the opportunity to work at a few startups which has allowed me to take on many responsibilities and force me out of my comfort zone. I work with languages and technologies that were initially unfamiliar to me, such as Golang, Scala, dependency injection, cloud services, and distributed systems. The startup environment has provided me with the opportunity to work on various code bases, across several teams, supporting an extensive list of technologies. I am currently seeking new opportunities to apply my skills and experience to work on projects that I can be passionate about, and be apart of a team with similar ideologies.

Computer Skills - Python, Golang, Java, C/C++, Git workflow, Linux, Cloud Services (AWS, GCP).

Experience

Cockroach Labs, New York, NY   May 2019 - Present
Software Engineer, Bulk I/O
- Cockroach Labs is responsible for CockroachDB, the cloud-native, distributed SQL database that provides next-level consistency, ultra-resilience, data locality, and massive scale to modern cloud applications.
- I work on 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 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, Git/Github, SQL, Goland.*

Dataminr, New York, NY   September 2018 - February 2019
Software Engineer, Content Search
- Dataminr is a real time information discovery company. We detect critical events and breaking information from social media, with Twitter being our largest data source.
- I help develop the tools used to search and filter through the massive Twitter pipeline and other media sources.
- JVM code base comprised of Scala and Java. Our applications run with the use of Amazon's AWS S3. It utilizes Apache Kafka and Amazon Kinesis for processing the large data sources.
- Migrated Pastebin data source from Kinesis to Kafka. Required work on multiple code bases belonging to other teams.
- *Tools & Technologies: Scala 2.11, Java 8, Maven, Docker, Kafka, Kinesis, Google Guice, Git/Gitlab, IntelliJ, MacOS.*

IBM Corporation, Yorktown Heights, NY   July 2017 - August 2018
Software Developer, Watson Health Cloud
- Increased test case coverage from 30% to 90% using Python unit tests since joining the team.
- Developed Python application on another team that moved their locally stored data and user accounts to Bluemix, IBM's cloud platform as a service.
- Designed and engineered a web application from the ground up using HTML, CSS, Angular, and Bootstrap. Responsible for the front-end, including page navigation using a MVC pattern.
- *Tools & Technologies: Python (2.7), Docker, HTML, Angular, Javascript, Linux, PyCharm, MacOS.*

UW-Madison Plasma Physics Dept., Madison, WI   Jan. 2016 - May 2017
Scientific Programmer
- Inherited former Ph.D. candidate's Python application, and enhanced it to communicate with additional instrumentation.
- Wrote new code to parse binary data recorded from experiments, and store it to a database.
- Wrote a GUI using tkinter to improve productivity for the team as they used the application for their research.
- Collaborated extensively with scientists and professors to deliver a fully functional application for their research.
- Organized and taught Python tutorials for graduate students, professors, and scientists unfamiliar with Python and OOP.
- *Tools & Technologies: Python (2.7), C++, Matlab, MacOS, Linux.*

Education

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