Jack Goldsworth

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Education

Iowa State University | Ames, IA.
Bachelor of Science in Software Engineering.
GPA: 3.09; Expected Graduation: Spring 2022.

Work Experience

Application Developer, Intern   **Mutual of Omaha**   **June 2020 - August 2020**
- Maintained and supported various microservices by writing unit tests, debugging code, and fixing runtime errors.
- Constructed software that automates excel reports to drastically lower report preparation time.
- Upgraded a microservice from IBM Web Sphere to Apache Tomcat, then transitioned that web-service into a Spring Boot application from Java Servlets to reduce technical debt.

Application Developer, Intern   **Mutual of Omaha**   **May 2019 - August 2019**
- Developed a Gradle plugin that can be used inside of a Jenkins pipeline to send files from Jenkins to Solr in order to reduce developer time spent manually uploading these files.
- Created a REST service using Spring that allowed my team to view the health of our microservices.
- Developed SOAP regression tests for an SQL Server 2008 to SQL Server 2016 migration.
- Upgraded a microservice's frontend from Angular 2 to Angular 8 to decrease technical debt.

Software Projects

Service Roomba
- Authored embedded software to allow a Roomba to autonomously traverse an obstacle course.
- Utilizing a servo motor and an IR sensor with an ADC, I found the distance and width of objects so that I could determine which objects to avoid, and where the end goal was.
- Utilized: C, UART, PuTTY, IR Sensor, Servo motor, ADC.

HwK
- Designed an imperative JVM language using ANTLR as the front-end and ASM for the backend.
- Integrated the visitor pattern to turn expressions and statements into JVM bytecode.
- Utilized: Kotlin, ANTLR4, ASM, Gradle.

Relevant Skills

Programming Languages: C, C++, Java, JavaScript, Kotlin, Python.
Software: Travis-CI, Jenkins, JIRA, Spring, MongoDB, SQL, Gradle, Git.