Jack Goldsworth

Email: jackgold@iastate.edu   Website: jackgoldsworth.me

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-August 2020**
- Maintained and supported various microservices by writing unit tests, debugging code, and fixing runtime errors.
- Created software that automates excel reports to drastically reduce report preparation time.

Application Developer, Intern   **Mutual of Omaha**   **May-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.
- Introduced Python scripts that automated excel reports to reduce report preparation time.
- Developed SOAP regression tests for a SQL server 2008 to 2016 migration.
- Upgraded a microservice's frontend from Angular 2 to Angular 8 to reduce technical debt.

Software Projects

Service Roomba
- Designed 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
- Created 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++, ARM Assembly, Java, JavaScript, Kotlin, Python
Software: Clion, Visual Studio, IntelliJ, Travis-CI, Jenkins, JIRA, Spring, MongoDB, SQL, Gradle, Git.