

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-August 2020

- Maintained and supported various microservices by writing unit tests, debugging code, and fixing runtime errors.

Application Developer, Intern

Mutual of Omaha

May-August 2019

- Developed a Gradle plugin that is to be used inside of a Jenkins pipeline to send files from Jenkins to another server where they can be properly requested using Solr.
- 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

- Developed embedded software that allowed a Roomba to traverse an obstacle course.
- Utilizing a servo motor to scan an 180 degree area, and used an IR sensor with an ADC to find the linear distance of objects with a goal of determining the finish zone and avoiding objects.
- Utilized: C, UART, PuTTY, IR Sensor, Servo motor, ADC.

HwK

- Created a JVM scripting language using ANTLR as the front-end and ASM for the backend.
- Integrated the visitor pattern to turn expressions and statements into JVM bytecode.
- Designed basic math optimizations based on values to reduce instruction complexity.
- Utilized: Kotlin, ANTLR, ASM, Gradle.

Relevant Skills

Programming Languages: C, C++, ARM Assembly, Java, JavaScript, Kotlin, Python

Software: Clion, IntelliJ, Travis-CI, Jenkins, JIRA, Spring, MongoDB, SQL, Gradle, Git.