# JONATHAN BLUHM

Westminster, Colorado

## Technical Skills

Languages: Python, Java, C, HTML/CSS, JavaScript, SQL

**Developer Tools**: VS Code, Eclipse, Google Cloud Platform, Android Studio **Technologies/Frameworks**: Linux, Jenkins, GitHub, JUnit, WordPress

# Experience

Sphere Commerce 2021 – 2022

Software Engineer I

Westminster, Colorado

- Developed a service to automatically perform a set of unit tests daily on a product in development in order to decrease time needed for team members to identify and fix bugs/issues.
- Incorporated scripts using Python and PowerShell to aggregate XML test results into an organized format and to load the latest build code onto the hardware, so that daily testing can be performed.
- Utilized Jenkins to provide a continuous integration service in order to automate the entire process of loading the latest build code and test files, running the tests, and generating a report of the results once per day.
- Explored ways to visualize and send a daily report of test results to team members using HTML, Javascript, and CSS.

Software Engineer I

Superior, Colorado

- Worked closely with six other engineers to design, develop, deploy, and maintain software applications for the Dish Network uplink center. These applications provide monitoring solutions and IT support for uplink center workers.
- Upgraded six year old website to use modern web development tools. The older website had no modules and tests, so I integrated node.js into the project to allow for dependency management and testing. Developers can now easily modify and expand the website and be confident of their changes.
- Changed a web application design from a multi page application to a single page application. This allowed for interactive UI features to be added that could not have been in the old design. It also sped up the system by allowing some requests to be made in parallel, whereas before they had to be done sequentially. It also decreased the time of development; in the old design it was much harder to implement certain features.
- Integrated a web application with another service that our team provides. The integration of these services saves operators hours when performing certain tasks.
- Secured web APIs with a new Json Web Token security scheme. Also, upgraded my team's knowledge on Json Web Tokens, improving security for future projects.
- Handled on-call issues from stakeholders, saving the company money by minimizing downtime of our applications.
- Identified and corrected mistakes found during code reviews, leading to far fewer production bugs.
- Mentored new team members, allowing them to contribute to projects with confidence.

United States Navy 2013 – 2017

Nuclear Electrician

 $Groton,\ Connecticut$ 

- Solved problems efficiently by referencing manuals and textbooks.
- Retained the vital documentation for maintenance and history of the reactor control system.
- Communicated effectively with peers from a wide variety of disciplines and backgrounds.
- Functioned as an integral part within a watch team to maintain smooth operation of the reactor plant during complex evolutions.

# Education

## State University

Sep. 2017 – May 2021

 $Bachelor\ of\ Science\ in\ Computer\ Science$ 

City, State

#### Relevant Coursework

- Data Structures
- Algorithms Analysis
- Artificial Intelligence
- Systems Programming

- Software Methodology
- Database Management
- Internet Technology
- Computer Architecture

# Gym Reservation Bot | Python, Selenium, Google Cloud Console

January 2021

- Developed an automatic bot using Python and Google Cloud Console to register myself for a timeslot at my school gym.
- Implemented Selenium to create an instance of Chrome in order to interact with the correct elements of the web page.
- Created a Linux virtual machine to run on Google Cloud so that the program is able to run everyday from the cloud.
- Used Cron to schedule the program to execute automatically at 11 AM every morning so a reservation is made for me.

#### Ticket Price Calculator App | Java, Android Studio

November 2020

- Created an Android application using Java and Android Studio to calculate ticket prices for trips to museums in NYC.
- Processed user inputted information in the back-end of the app to return a subtotal price based on the tickets selected.
- Utilized the layout editor to create a UI for the application in order to allow different scenes to interact with each other.

### Transaction Management GUI | Java, Eclipse, JavaFX

October 2020

- Designed a sample banking transaction system using Java to simulate the common functions of using a bank account.
- Used JavaFX to create a GUI that supports actions such as creating an account, deposit, withdraw, list all acounts, etc.
- Implemented object-oriented programming practices such as inheritance to create different account types and databases.

# Leadership / Extracurricular

Fraternity

Spring 2020 – Present

President University Name

- Achieved a 4 star fraternity ranking by the Office of Fraternity and Sorority Affairs (highest possible ranking).
- Managed executive board of 5 members and ran weekly meetings to oversee progress in essential parts of the chapter.
- Led chapter of 30+ members to work towards goals that improve and promote community service, academics, and unity.