

# JONATHAN BLUHM

Westminster, Colorado

📞 719-243-9318    ✉ [bluhmjc@gmail.com](mailto:bluhmjc@gmail.com)    🌐 [github.com/johnnybluhm](https://github.com/johnnybluhm)

Deep thinking, adaptable computer enthusiast with a passion for learning. Cursed with a never ending thirst for more knowledge. Addicted to figuring out how things work. Blessed with the ability to see how things connect.

## Technical Skills

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**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

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### Sphere Commerce

**2021 – Present**

*Software Engineer*

*Westminster, Colorado*

- Cleaned up unnecessary logs made by our logging service, reducing the amount of data logged to splunk every day from 200GB to 10GB.
- Identified and corrected memory leak in long running process. The fix allowed us to change the machine it was running on from an i2, to an i1 instance, saving around \$300/month.
- Fixed unit tests that would periodically fail. Due to the multithreaded nature of the integrated payment application, certain unit tests would fail due to timing issues. Many of these were fixed, leading to far quicker builds and easier development.
- Improved the logging service to use correct timestamps, greatly aiding developers in their debugging.

### Dish Network

**2021 – 2022**

*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*

- Functioned as an integral part within a watch team to maintain smooth operation of the reactor plant during complex evolutions.
- 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.

## Education

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### University of Colorado Boulder

**2019 – 2021**

*Bachelor of Science in Computer Science*

*Boulder, Colorado*

- GPA: 3.76
- Course Work: Linux System Admin, Network Systems, Operating Systems, Robotics, Algorithms, Human Computer Interaction, Data Structures, Cybersecurity, Machine Learning, Calculus 1-3, Probability and Statistics, Linear Algebra

## Projects

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### 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 accounts, etc.
- Implemented object-oriented programming practices such as inheritance to create different account types and databases.

## Leadership / Extracurricular

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### 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.