

## Education

- 2016-2021 **Computer Science**, *Rochester Institute of Technology*, Rochester, NY, 3.54 GPA.
- 2nd Year, Dean's List - Fall 2016 & 2017/Spring 2018, RIT Linux Users Group & RIT Anime Club
  - Courses: Computer Science I & II, Mechanics of Programming, Intro to Computer Science Theory, Calculus I & II, Concepts of Computer Systems, Intro to Software Engineering, Linear Algebra, Discrete Math, Principles of Data Management, Intro to Cryptography, Free and Open Source Culture

## Projects

- **Reddit-Refresh-Online** (<https://git.io/rr-online>)
  - Co-programmer and lead designer for a web application using the Rocket framework
  - Using Reddit-Refresh-Rust and Rust's Rocket web framework, developed the server backend for a service using Pushbullet's OAuth for login and PostgreSQL as a database.
  - The backend is mostly done at this point as well as the database, my co-programmer just needs to finish up the front-end work.
  - The current frontend is online at [redditrefresh.online](https://redditrefresh.online), but much work still needs to be done.
- **BF-Lang\_C** ([https://git.io/bf-l\\_c](https://git.io/bf-l_c))
  - Wrote a fast Turing-complete Brainfuck interpreter in C
  - Designed and implemented an interactive mode which can handle completing loops split between lines
  - Dynamically allocated cell storage that continues expanding as needed
- **Reddit-Refresh-Rust** (<https://git.io/rr-rust>)
  - Rewrite and rework of my Reddit-Refresh application (originally Python) in Rust to make it faster and more extensible
  - Server application written in Rust which scans subreddit(s) for a search term on a timer, sending any new results to user-specified devices via the Pushbullet API
  - Base functionality implemented; future features include filtering based on flair, appending flair to title, and appending time and date to title
- **Lead programmer and designer for a Java-based AI which plays the game Pathbuilder**
  - Implemented Dijkstra's algorithm, backtracking, and threading
  - Won 2<sup>nd</sup> place in a tournament of ~110 teams

## Skills

Programming Languages	Python, Java, C, C#, Lua, MIPS Assembly, Haskell, Rust, SQL	Technologies	Git, PostgreSQL, Matplotlib, SSH, JavaFX, Spark, JSON, XML, TOML, Rocket
Operating Systems	Linux, Windows, Android	Software	PyCharm, IntelliJ, Vim, Bash, LaTeX, gdb, valgrind, stack, cargo, QEMU
Other	Agile software development; strong team communication skill and a drive to learn		

## Experience

- 2018–Current **Computer Science Intern**, *Assured Information Security*, Rochester, NY.
- Implemented an automated testing solution across multiple architectures and kernel versions with QEMU or on any virtual machine, written in Python.
  - Added a number of features to our main product in order to get it ready for a new release version.
  - Participated in daily stand-up meetings and sprint planning sessions.