

## EDUCATION

### Purdue University

B.S. Computer Science, B.S. Mathematics

Concentrations in Systems Programming, Security

Dean's List Each Semester, Collins Aerospace Merit-Based Scholarship Recipient

West Lafayette, IN

August 2017 – May 2021

GPA 3.80 / 4.00

## EXPERIENCE

### Amazon

*Software Development Engineer Intern*

Tempe, AZ (Virtual)

May 2020 – August 2020

- Expand Scala clustering pipeline over Apache Spark used by 98 teams to support external data.
- Design metrics framework for libraries over Amazon CloudWatch. Instrument clustering library.
- Deliver multiple presentations to over 30 engineers and leaders. Win “favorite demonstration”.
- Document internship outputs with explanatory, interactive notebooks.
- Research and discover novel methods to avoid association. Maintain lowest clustering score in internal red team competition.

### Springbuk

*Software Engineering Intern*

Indianapolis, IN

May 2019 – July 2019

- Implement backend logic using Ruby and PostgreSQL for in-house data warehousing solution.
- Synthesize custom front-end enhancements in React used by thousands of business clients.
- Create and execute several database migrations with Ruby on Rails for ETL system.
- Introduce version 2.0 of RESTful API and update endpoints to support Salesforce integration.
- Present and document multiple non-trivial debugging tools compatible with Docker.

### Purdue University Department of Computer Science

*Lab Lead, Quality Assurance, Curriculum Developer, Teaching Assistant*

West Lafayette, IN

July 2018 – May 2020

- Direct lab section with four teaching assistants during summer Bridge program.
- Deliver technical presentations and mentor 74 students with little programming experience.
- Ensure correctness and quality of labs, handouts, quizzes, and practice exams.
- Develop new challenging content and activities including four new labs with JUnit tests.

## PROJECTS

**Kleene** — *An iOS app that plays music from Apple Music, Deezer, and Spotify and transfers songs between music services.*

- Oversee application design and planning.
- Build application using UIKit, Firebase, Heroku, and music service APIs.

**GroupMac** — *A GroupMe client for macOS. Users can view conversations, like messages, and send messages. Look mimics GroupMe website.*

- Design and build entire application utilizing Swift, AppKit, Xcode, and GroupMe API.
- Publish on GitHub.

**Emoji Detector** — *An iMessage app that suggests Emojis matching the user's facial expression.*

- Architect and build entire application using Swift, UIKit, Xcode, and CoreML.
- Release on App Store for one year.

**Swell** — *A shell written in Swift.*

- Construct entire shell with command and argument parsing, pipes, change directory, input redirection, and interrupt handling.
- Publish on GitHub and receive 27 stars.

## INVOLVEMENT

### Purdue iOS Development Club

- Fix bugs in Purdue Student Companion App, downloaded by thousands of students.
- Develop visually appealing dark mode.

## SKILLS

**Languages** — *Swift, Java, Rust, Scala, Ruby, C*

**Tools** — *git, GitHub, Xcode, JetBrains IDEs, LaTeX, vim, Angular, Docker*

**Coursework** — *Operating Systems, Compilers, Real Analysis, Algorithms and Data Structures*