

## **EDUCATION**

**University of Illinois Urbana-Champaign, Champaign, IL**

Bachelors of Science, Computer Engineering

Classes: Computer Systems Programming

**May 2021**

GPA 3.38/4.00

## **EXPERIENCE**

**FIRST Tech Challenge Illinois, Roving Mentor**

**June 2018 - Present**

- Assisted various FIRST Tech Challenge teams and students across Illinois with tasks such as design, construction, and building of robots through classroom-like sessions in conjunction with one-on-one mentorship
- Prepared lessons for future use by other FTC mentors on topics such as programming and CAD

**Burton Energy, Mobile Development Contractor**

**December 2017 - August 2018**

- Contracted to develop an energy survey application for McDonald's corporation
- Used complex but adaptable data structures to store all of the information necessary to survey and analyze any McDonald's restaurant and find key energy saving opportunities
- Designed, implemented, tested, and improved product to meet client needs as a private contractor

**Swarm Robotix, Lead Intern, VP of Innovation**

**March - August 2017**

- Managed a team of 14 interns to build and program 4 robots to work together to move shipping containers
- Created job descriptions and interviewed candidates for other internship positions
- Completed 2 prototypes in rapid development cycles over 70 days
- Programmed autonomous routines and a network base for a multi-robot system
- Attended capital raise meetings and talked to investors about potential designs

## **ACTIVITIES**

**FIRST Robotics Competition Team #2338**

**Mentor**

**2017 - Present**

**Programming Captain, Head Application Developer**

**2013 - 2017**

- Worked with other leaders to manage team of 50+ students to design and implement robotics solutions to game challenges using industry standard tools like Autodesk Inventor and the Java development platform
- Developed and released 5 Android applications, 1 iOS application
  - ❖ Implemented a cross-platform REST api for data storage and access using Firebase and AWS
  - ❖ Deployed each application to over 1000 users over 3 years

## **SKILLS**

**Programming languages:** Java, C/C++, Python, Swift, XML, Kotlin, LabView, Groovy, JavaScript, HTML

**Software:** Autodesk Inventor, Autodesk Fusion 360, Solidworks, Adobe Photoshop, Adobe Illustrator, Git

## **PROJECTS**

**Python Eye Training:** Open-source application designed to help people with physical and neural impairments

**Squares Android Application:** Developed full software stack including server, client, and interface to implement a brain game

**Hackathons:** HackIllinois 2018, BoilerMake V (2017)

## **AWARDS**

**Eagle Scout - Boy Scouts of America**

**April 2014**

- Led 30+ people in large-scale service project collecting and sorting school supplies for children