

# Brendan Burkhart

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## EXPERIENCE

### Pigmice Robotics, FRC Team 2733 (2016 - Present)

- Current Programming Captain
- Robotics programming and computer vision using Java, Python, C, and OpenCV for 2017, 2018, 2019 seasons.
- Backend RESTful web development using Go and PostgreSQL
- Development of lessons and tools to teach new team members programming, robotics and best practices.
- Continuous integration, unit testing, and integration testing to tackle bugs before they make it into production.
- Community outreach - founded and guiding 5 middle school Lego robotics teams, and putting on robot demos meant to inspire the next generation of engineers, scientists, and creators.

### Microsoft (2017)

- Worked with the Information and Content Experiences team.
- Week-long, unpaid internship.
- Frontend web development for MSN.
- Quickly picked up new technologies to create working products.
- Worked with both frontend and backend developers to create seamlessly functioning software.
- Experienced how professional software development teams work together to bring great software into the world.

## PROJECTS

### Peregrine — *Data and analytics app*

Progressive Web App for data collection and analytics at robotics competitions. Uses Go, PostgreSQL, and Docker.

Website: <https://peregrine.ga>

Code: <https://github.com/Pigmice2733/peregrine-backend>

### Scorpion — *Software for FRC robot (2019 season)*

Java software for the FIRST robotics 2019 season, equipped with computer vision, automated high-precision, and high-speed control.

Robot code: <https://github.com/Pigmice2733/frc-2019>

Computer vision code: <https://github.com/Pigmice2733/DeepSpaceVision>

## SKILLS

Backend Web Development  
(Java, Go, PostgreSQL,  
Docker)

Robotics Programming (Java,  
C, Python, Arduino)

Computer Vision (Python,  
OpenCV)

Database Administration  
(PostgreSQL, SQLite, Docker)

Teamwork and Project  
Management

Some experience in C#, C++,  
and Javascript

Always willing to pick up new  
tools as needed

## PROFESSIONAL LINKS

- [GitHub](#)
- [My website](#)
- [LinkedIn](#)

## EDUCATION

### Cleveland High School, Portland, OR — 4.0 GPA

2016 - PRESENT

Relevant courses - all A  
grades:

- IB Physics SL
- IB Calculus HL
- IB Chemistry SL
- Computer Programming