

# Alexander Kwasinski

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Portfolio: [alexander-kwasinski.github.io/portfolio/home.html](https://alexander-kwasinski.github.io/portfolio/home.html) | GitHub: Alexander-Kwasinski

## EDUCATION

### The University of Pittsburgh

08/2023 – 2027

*BS in Computer Engineering | GPA: 3.85/4.0*

- Institute of Electrical and Electronics Engineers, Society of Hispanic Professional Engineers
- Plus3 South Korea: Studied abroad while touring engineering companies, learning about smart systems, and experiencing culture

## WORK EXPERIENCE

### Math Tutor at Mathnasium

01/2022 – 06/2023

- Taught math to students from 6 to 18 years old
- Worked with up to 5 students of differing math levels and ages at once
- Helped improve students' grades by answering questions and teaching higher-level topics

### High School Research Assistant

06/2022 – 08/2022

*Worked with Dr. Ortega-Llebaria from the University of Pittsburgh*

- Compiled information from over 100 participants using different data sources using Python scripts
- Used code to give accuracy scores to participants to ease readability
- Language of communication: Spanish

## PROJECTS

### University Rover Challenge: Robotics and Automation Society

08/2023 – present

*Software and Electrical Team Leader*

- Directing a team of 7+ to accomplish our software and electrical competition tasks
- Created embedded systems that interfaced with a Jetson Nano using the Ubuntu Linux operating system
- Incorporated Robotics Operating System (ROS2) to ease navigation and control
- Coded a GUI in Python to allow for user movement control
- Utilized Arduino, code, and hardware to control movement and gain data from the surrounding area

### Micromouse Competition: Robotics and Automation Society

08/2023 – present

*Electrical Subteam Member*

- Working with a team to build and test a physical micromouse robot
- Wired and created firmware to confirm component viability
- Contributed to the research and purchase of necessary components
- Created a working prototype of the mouse to test maze-solving algorithms

### Technology Student Association: Drone Challenge (UAV) Competition

08/2022 – 04/2023

- Placed 1st of around 40 teams in the state of Pennsylvania
- Organized meetings and tasks for a team of 4
- Designed and built a drone with a claw using CAD, electronics knowledge, and soldering
- Researched and bought components under a 500-dollar budget

## RELEVANT COURSES

Current: ECE Problem Solving with C++, Digital Circuits and Systems, Linear Circuits and Systems, ECE Analytical Methods

Completed: Intro to Engineering Computing, Applied Discrete Math, Intro to Engineering Analysis

## SKILLS

C++, C, Java, Git and GitHub, Linux, ROS2, Arduino, HTML, CSS, MATLAB, Excel, Microsoft Office, CAD, Electronics, Spanish

## AWARDS AND SCHOLARSHIP

University of Pittsburgh: Swanson School of Engineering Dean and Term Honors List, Swanson Engineering Excellence Scholarship, Cathedral of Learning Achievement Scholarship

High School: College Board National Recognition Program Award: Hispanic, AP Scholar with Distinction Award