# **Wyatt Harris**

Belmont, MA, Email: harrisw522@gmail.com, Phone: 781-690-3302

#### **EDUCATION**

Worcester Polytechnic Institute, Worcester MA
Robotics Engineering Major, BS/MS, 3.96, Graduation Date May 2025

#### **SKILLS**

Java, C++, Python, Solidworks, Matlab, C, 3D Printing, Figma, Laser Cutting, MathCAD, Soldering, Github

#### **WORK EXPERIENCE**

Worcester Polytechnic Institute

Prototyping Lab Assistant (April 2023 - Present)

- Oversee 30+ 3D printers and laser cutters in schools prototyping lab
- Assist and train students in creating prints and laser cuts

#### Mathnasium

Math Tutor (May 2022 - Aug 2022)

- Tutored students in math ranging from addition to algebra
- Worked with 2-3 students at a time, and wrote reports for their parents about their sessions

### **SCHOOL ACTIVITIES**

• Ultimate Frisbee D3 Club Team, Chess Club, Phi Kappa Theta

## **PROJECTS**

Swarm Robotics Pathfinding Algorithm, Artificial Intelligence, (May 2023 - Present)

- Group of 4 implemented 3 emerging algorithms in Swarm Pathfinding field
- Simulated swarm robots navigating 2D environments using Python packages
- Analyzed and compared emerging algorithms in paper and presentation

Robotic Grip Assist Glove, Research, (Feb 2023 - Present)

- Work with 2 other students under a professor to make glove that grips objects with voice control
- Arduino controlled attachment to a glove uses a motor to control fingers

Maze Solving Robots, Unified Robotics II: Sensing, (Sept 2022 - Nov 2022)

- Multiple robots navigate maze to exit door
- Use a wifi connection to an MQTT broker to upload and receive data
- Programmed PID control integrated with encoders, ultrasonic, and IR distance sensors
- Connections using I2C, UART, and Interrupts

# **VOLUNTEER EXPERIENCE**

FIRST Robotics Mentor, Belmont MA, (Dec 2021-March 2022)

- Ensuring that all members of the club are engaged and participating
- Enforce safety practice with any power tools (bandsaw, drill press, etc.)