

Joseph Marcinowski

Hopkinton, MA | (508) 834-0218
joeymarcinowski@gmail.com

Professional Summary

I am passionate and curious about robotics and software development. My goal is to create meaningful healthcare software or robots.

Programming projects: jmarcinowski.github.io

Experiences

Wang Research Laboratory - Massachusetts General Hospital

Data Analyst Volunteer | 08/2022 - 08/2022

- Worked as a data analyst volunteer for the Wang lab, which researches ovarian cancer.
- Worked on single-cell human genome sequencing and mapping.
- Developed a script for the researchers to automate repetitive tasks and run asynchronous batches of single-cell sequencing.

VEX Robotics Team 2602B

Lead Programmer | 05/2022 - 05/2023

- Double qualified for VEX Worlds 2023 in Dallas Texas and was awarded with the Google Community Award.
- Won the Design Award from the Southern New England Regional Championship, the region that has 169 teams.
- Accomplished a perfectly tuned PID turn using a C++ genetic algorithm which led to high competition scores.
- Found a plausible shortest path between VEX robotics field elements using Hamiltonian paths and genetic algorithms contributing to winning the Think Award in a 52-team competition in Ridgefield CT.
- Accomplished robotic path following using the Pure Pursuit algorithm in C++ leading to semi-autonomous navigation, high competition scores, and contributed to winning awards.

VEX Robotics Team 2602H

Lead Programmer | 05/2021 - 05/2022

- Won 4 Excellence Awards, the Southern New England Innovate Award, and 2 Design Awards which allowed us to attend the world robotics championship in Dallas where we won the Google Community Award and VEX Worlds Innovate Award.
- Accomplished swift, accurate, robotic turns using PID in C++ leading to high scores.

VEX IQ Slapshot Southern New England Championship

Head Referee | 03/2023 - 03/2023

- As a head referee, I was responsible to act as a liaison between teams and scorekeeper referees.
- I identified rule violations and made all final scoring and ruling decisions. I worked to ensure matches were running in a safe and timely manner.
- The winners of this regional competition went on to compete in Dallas at the VEX Robotics World Championship.

High School Code Club

President | 09/2021 - 05/2023

- I taught some Hopkinton High School students to learn how to program.
- I taught everything from introductory concepts like variables to advanced topics such as web programming.

Milford Regional Hospital Fund Raising Club

Secretary | 02/2022 - 05/2023

- Each week, I organized and helped lead dozens of students in our school's Milford Regional Medical Center club.
- The club's goal was to raise as much money as possible to support our local hospital.
- We have raised hundreds of dollars and have done multiple fundraisers.

Education

Bridgewater State University | Bridgewater, MA

Computer Science | 05/2027

- I am a sophomore year computer science student.
- I received the Crimson Merit Scholarship and was accepted into the Honors Program.
- I received a scholarship from the Armed Forces Communications & Electronics Association