

Kevin Siegall

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EDUCATION

Worcester Polytechnic Institute

BS, Computer Science; BS, Robotics Engineering

Expected May 2025

Worcester, MA

- Relevant Classes:

Unified Robotics, Algorithms, Object Oriented Design Concepts, Digital Circuit Design, Linear Algebra

WORK EXPERIENCE

Jacobs Technology – Jacobs Software Engineering Center

Software Engineering Intern

May 2022-Aug 2022

Hudson, NH

- Worked in an Agile environment on a WPF-based application running on the .NET Framework
 - Exercised my object-oriented techniques such as dependency injection and encapsulation in C#

OpenSTEM: Experimental Robotics Platform

Software Developer, Teacher/Curriculum Author

Aug. 2022 – Current

Worcester, MA

- Developed an extensible Python library designed for classroom use on a small robot.
 - Documentation can be found at <https://introduction-to-robotics.readthedocs.io/>
- Helped design a curriculum to be spread to teachers around the world using the code as a teaching tool.

EXTRACURRICULARS & PROJECTS

Vex U Robotics Competition, WPI: The Notorious G.O.A.T

Head Programmer, Documentation Lead

Sept. 2021 – Current

Worcester, MA

- 2022: Built a python application for Bezier spline creation and robot simulation
 - Developed a kinematics simulator for testing control algorithms, such as Pure Pursuit or Stanley Control
 - Code Repository located at <https://github.com/AnselChang/PathGeneration>
 - Applied those algorithms to simultaneously control two competition robots.
- 2021: Designed and established a consistent codebase for controlling the movement of our two robots.
 - Applied physics principles such as inverse kinematics for controlling a two-jointed-arm.

SnakeBot

Programmer, Designer, Personal Project

April 2023 – Current

Dix Hills, NY

- Attempting to make a robot that can locomote in a way that simulates a snake's motion.
 - 3D printed; each segment is controlled by Micro Servos hooked up to a Raspberry Pi Pico W
 - Programmed with Micropython (I couldn't pass up the opportunity to code a snake in Python)

TECHNICAL SKILLS

- **Programming:** Java, C#, Python, C, C++, JavaScript, MATLAB; ArduinoC, MicroPython
- **Version Control:** GitHub, Azure DevOps, GitLab
- **Computer-Aided Design:** Autodesk Inventor, Solidworks, Fusion 360
- **Other:** Arduino, Raspberry Pi, FPGA, Verilog, MathCAD, Microsoft Office

LEADERSHIP

Boy Scouts of America, Troop 106

Eagle Scout, Senior Patrol Leader, Assistant Senior Patrol Leader, Troop Guide

Mar. 2014 – July 2021

Huntington, NY

- Taught newer scouts many skills, including tying ropes, fire building, orienteering, and first aid.
- Eagle Scout earned April 22nd, 2021