# Kevin Siegall (They/He)

krsiegall@wpi.edu � (631) 546-8383 � NY/MA � github.com/kreeevin � linkedin.com/in/kevin-siegall

#### **EDUCATION**

#### Worcester Polytechnic Institute

May 2025

B. S. Computer Science; B. S. Robotics Engineering

Relevant Classes: Software Engineering, Unified Robotics Series: Actuation, Sensors, Manipulation, Navigation

Worcester, MA

## WORK EXPERIENCE

## OpenSTEM: Experiential Robotics Platform (XRP)

Aug 2022 - Present

Lead Software Developer, Curriculum Author

Worcester, MA

Hudson, NH

- Spearheaded the development of an extensible MicroPython library built for classroom use with small robots.
  - o Created a web socket server for remote control of the robot
  - o Implemented I2C communication with the LSM6 IMU
- Wrote a curriculum to be spread to teachers around the world, using the robots to teach programming.
- More details about the project can be found at <a href="http://experientialrobotics.org">http://experientialrobotics.org</a>

# Jacobs Technology – Jacobs Software Engineering Center

May 2022 – Aug 2022

Software Engineering Intern

- Operated in an Agile environment on a WPF-based application running on .NET Framework
- Expanded upon an in-house product, used to add and sort filters to be applied to the DAFIF database
- Exercised object-oriented techniques such as dependency injection and encapsulation in C#

## **PROJECTS**

## WPI Vex U, Software Team

Sept 2021 - May 2023

Programming Co-Lead, Documentation Lead

Worcester, MA

- Developed a python application for Bezier spline creation and robot simulation
- Applied control algorithms such as Inverse Kinematics, PID, and TBH (Take Back Half) Control
- Designed a modular codebase for controlling the individual movements of our two different robots

## Brigham and Woman's Hospital Application

Mar - May 2023

Lead Software Engineer

Worcester, MA

- Made a hospital kiosk application, allowing for pathfinding, submitting work orders, and customizing signage.
- Led a team of 11 in developing a full Java application for WPI's CS 3733 Software Engineering Class
- Utilized Figma to create and iterated on Front-End UI Mockups before implementing in JavaFX
- Implemented Façade, Singleton, and other design patterns for clean integration with the backend SQL Database

#### **WPI IGDA Game Jam Submissions**

Fall 2022 - Present

- Howline Maine A top down precision speed game where a werewolf hunts park rangers, inspired by Hotline Miami
- Cosplay Conundrum An isometric multiplayer party game taking place in a convention.

#### XyloCat – Xylophone Playing Cat Robot

Fall 2022

• Servo-driven paws move mallets to play a small xylophone given a MIDI input through Serial Communications

## **TECHNICAL SKILLS**

Languages	Java, C#, Python, C++, C, MATLAB, TypeScript
Frameworks	Arduino, MicroPython, .NET, Simulink, Unity Game Engine
Version Control	Git, Github Projects, Azure DevOps, Jira
Other	Autodesk Inventor, Figma, OpenMV, Raspberry Pi, FPGA, MathCAD, Microsoft Office

#### Extracurriculars

WPI Cooking Club, President	April 2023 - Present
WPI Bowling Club, Treasurer	Aug 2022 – Feb 2023
WPI VexU, Software Co-Lead	Aug 2022 – Feb 2023
WPI International Game Developers Association (IGDA)	Aug 2022 - Present
WPI Hillel	Aug 2021 – Present
Boy Scouts of America, Troop 106, Eagle Scout	Mar 2014 – July 2021