

School Address:  
100 Institute Road  
Box 5456  
Worcester, MA 01609

# Ezekiel Andreassen

eandreassen@wpi.edu  
(786) 417-2856  
Portfolio: Zekebuilds.com

## EDUCATION

**Worcester Polytechnic Institute, Worcester MA**

Bachelor of Science in Robotics Engineering, May 2022 (*GPA 3.5/4.0*)

## SKILLS

**Programming Languages:** C, C++, Python, ROS, MATLAB, Java, adaptable to new languages

**Equipment:** CNC Mill, Manual Lathe, 3Dprinting, Arduino, Teensy, ESP32, Raspberry Pi, BLDC Motors, and Motors

**Relevant Coursework:** Electromechanical Actuation, Intro to Analog and Digital Filters, Embedded Systems, Robotic Manipulation and Vision Processing, Navigation & Mapping, Stress Analysis

## PROJECTS

**Battle Bot, Heavyweight Combat Robot, WPI,**

**Jan 2019 – Present**

- Worked on Team Ribbot, a dean sponsored team that competes on the Discovery TV show “*BattleBots*”
- Designed mechanical assemblies for high dynamic loading conditions using CAD & FEA
- Iterated assemblies to ensure reliability with high levels of redundancy and repairability

**Carousel, Mechanical Display Art, WPI,**

**Aug 2020 – May 2021**

- Integrated separate electromechanical components for final product
- Look for details on my portfolio

**Quadruped, Capstone, WPI,**

**Sep 2020 – May 2021**

- Implemented distributed computing system across multiple microcontrollers in C++ & Python
- Designed low-mass linkage and transmission to lower power requirements and simplify wiring
- Researched high level control algorithms for static and dynamic walking gates

## WORK EXPERIENCE

**Robotics Lab Assistant, WPI,**

**Oct 2019 – Present**

- Tutored robotics students
- Stocked inventory and filled student part orders
- Prepared student instruction and aided development of student robotics coursework

**Engineering Intern, Syntheon LLC, Miami FL,  
2018**

**June - Aug 2017 &**

- Developed prototypes of peripherals for endoscopic devices
- Designed tooling for manufacturing medical devices

## Additional Interests

**Sailing Director, YMCA Camp Warren, Eveleth MN,  
Aug 2021**

**Jun 2018 –**

**Manager, Climbing Gym, WPI,**

**Feb 2019 – Jun 2020**

**Carbon Composite Skateboard Deck, WPI,**

**Feb 2020 – May 2020**

**Exec Officer, Outing Club, WPI,**

**Feb 2019 – Jan 2021**

**3 lb Combat Robotics, FL, MA, CT,**

**Aug 2016 – Present**