# **Ryan Ramminger**

Chicago, IL | (608) 332-1686 | rramminger01@gmail.com | Portfolio | LinkedIn

#### Education

## **University of Birmingham – United Kingdom**

Master of Science – Robotics

University of Wisconsin - Green Bay

Bachelor of Science - Mechanical Engineering, GPA: 3.54/4.0

Minor in Mathematics, Business

May 2022

May 2024

### **Academic Project**

Blind Navigation Assistance with Feedback Glove: Computer Vision, Python, Raspberry Pi, Vibration Motors

Sept 2023

- Engineered a real-time object detection deep learning vision system to trigger vibration motors on the user's palm.
- Encoded robust error handling, motor control mechanisms, and a custom 3D-printed camera housing for reliable and safe system operation.
- Paper "Navigation Assistance for the Visually Impaired Using Deep Learning and a Vibrotactile Glove" [1].

# **Professional Experience**

#### Freelance Engineer / Hardtech Development Contractor | mHUB

August 2024 – Present

- Develop and implement tailored solutions that improve functionality and efficiency, ensuring successful project outcomes and client satisfaction.
- Provide engineering expertise to client companies, identifying and addressing key challenges in product design and process optimization during collaborative brainstorming sessions.

### **Operations Associate | Knot My Boat Charters**

May 2024 – Present

- Conduct thorough inspections of mechanical components and safety equipment on 30-45-foot boats, ensuring optimal functionality and readiness for daily charters, report issues promptly to management.
- Monitor and maintain cleanliness, fuel, and waste levels on boats; provide exceptional customer assistance as needed to ensure a seamless charter experience.

#### Social Media Marketing Consultant and Customer Support Assistant | Nifted

May 2022 - Sept 2023

- Produced engaging video content to promote products and brands on social media platforms.
- Worked collaboratively with product teams and marketing managers to produce compelling video content that drove up engagement, conversions, and sales.
- Provided support for Help Desk tickets and troubleshooting related to Nifted devices as needed.

#### Team Swim Coach (Volunteer) | Green Bay Athletics

Aug 2021 - Nov 2021

- Collaborated in a team of five to coach NCAA Division 1 swim team following resignation of swim coach.
- Tailored individualized training programs for swimmers, fostering personalized development strategies while coordinating team practices and optimizing competition lineups.

#### Food Service and Lead Caterer | Biebel's Catering and Rental

June 2021 – Sept 2021

- Facilitated communication between management and clients for food services to groups of up to 800 people.
- Coordinated team time management for timely delivery and customer satisfaction.
- Directed events independently, serving up to 100 people, while organizing personnel, supplies, and materials to deliver quality services.

#### Skills

- Applications: SolidWorks, AutoCAD, Tinkercad, Onshape, Simulink, ANSYS Workbench, Google Colab, Jupyter Notebook, Microsoft Office 365, ROS, GitLab
- Technical Tools: FEA, Mechatronics, Control Systems, Embedded Systems, Arduino, Raspberry Pi, Sensors, Actuators, Machine Vision, Image Processing, OpenCV, Caffe, TensorFlow, PyTorch, Linux, CapCut
- **Programming Languages:** MATLAB, Python, C/C++, PowerShell

#### **Honors and Affiliations**

Jan 2023 - May 2023 **UBRobotics Club** 

University of Wisconsin – Green Bay Degree Honors: Cum Laude

May 2022 May 2021

University of Wisconsin – Green Bay Swim Team Captain's Award for Leadership

Sept 2018 - May 2022

Sept 2017 – May 2022

University of Wisconsin – Green Bay Colleges against Cancer President University of Wisconsin – Green Bay NCAA Division 1 Men's Swim Team