

Ulrico Zampa

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EDUCATION

Bachelor of Science in Engineering (BSE) in Naval Architecture & Marine Engineering

University of Michigan • Ann Arbor, MI • 2028

Harrow School

London, United Kingdom • Graduated: July 2024

PROJECT TEAMS, WORK EXPERIENCE

UM::AUTONOMY – Autonomous Boat Project Team | August 2024 – Present (Ann Arbor, Michigan)

Chief Naval Architect (August 2025 – Present)

- Began recruiting and training new team members at mass meetings, guiding them through onboarding projects consisting of designing their own small-scale vessel on Rhino7/Orca3D to manufacture and learn about fabrication process.
- Manufactured CNC-milled molds from polyurethane foam tooling board for carbon fiber composite layup.

Mechanical Sub-Team (August 2024 – May 2025)

- Member of an award-winning undergraduate project team designing and building an autonomous boat for the RoboNation Roboat competition contributing to the structural design and fabrication of vessel.
- Revised and improved hull design, to mono hull structure optimizing hydrodynamic efficiency and overall performance over the previous multi-hull configuration for better maneuverability.
- Managed the construction of a vessel, specifically designing and composite manufacturing using mold fabrication, wet layup vacuum bagging with carbon fiber and fiberglass.
- Developed and tested boat advanced capabilities including a ball launching mechanism using CAD modeling, 3D printing, CNC machining for optimal performance.
- Selected as part of the competitive team representing UM at the RoboNation Roboat Competition in Sarasota, FL, in March 2025.

Architecture Model Studio “Modelli Marchesoni” | July 2023 – August 2023 (Lamone, Switzerland)

- Worked full-time in an architectural and engineering model-making studio, contributing to high-precision scaled models
- Utilized Rhino 7 software to develop architectural projects and collaborated with architects to fabricate wooden and 3D-printed models using CNC machines

Team Euclid, Harrow School First Robotics Club and FIRST Tech Challenge (FTC)

July 2022 – June 2024 (London, United Kingdom)

- Founding member and mechanical engineer for Harrow School’s first robotics team
- Developed and programmed competitive robots, leading to three awards at the UK Southeast Regional Heats, including a special prize for Best Code (sponsored by ARM)
- Competed in the National Finals at Cambridge University (June 2023), ranking among the top 8 teams
- Designed and built custom robotic mechanisms, including precision gear assemblies & drive systems for optimized mobility

HONORS & AWARDS

American Bureau of Shipping Scholarship | May 2025

- Awarded for academic excellence and commitment to the NAME program (2025–2026 academic year)

Dean’s List: Fall 2024 & Winter 2025 | University Honors: Winter 2025

RESEARCH EXPERIENCE

UC Irvine x GATI Program | September 2022

- Conducted independent research on Arduino microcontrollers for accessible prototyping and electronic design
- Published a research paper titled "Exploring How an Arduino Microcontroller Can Make Prototyping and Electronic Design More Accessible: My Journey Building a Powered Sled."
- Earned an A grade and 3 college credits from University of California, Irvine

SKILLS

- **Fabrication & Engineering Tools:** 3D printing, CNC manufacturing, marine vessel modelling, carbon fiber wet layups
- **Software:** SOLIDWORKS, Rhino 7, Orca3D, Fusion360 ; **Programming:** MATLAB, Python, C++