

EDUCATION

University of Michigan, Ann Arbor	Graduating May, 2028
Double Major: <i>B.S. Computer Engineering and B.S. Robotics Engineering</i>	GPA: 3.91/4.0
<ul style="list-style-type: none">• Classes: Electrical Circuits; Programming & Data Structures; Systems Engineering MBSE; Signals; Dynamics & Vibrations• Dean's List (2024, 2025); University Honors; William J. Brainstorm Award	

WORK EXPERIENCE

Nupeak Robotics	Vancouver, BC
Embedded System Engineering Intern May, 2025 – Aug, 2025	
<ul style="list-style-type: none">• Designed multiple iterations, assembled, and tested 6 PCBs (200+ components, 4 layers) using KiCad• Wrote embedded firmware, enabling SPI and I²C communication with peripheral sensors and actuators (haptics)• Developed multiple iterations of interactive UI for TFT Displays with SquareLine Studio• Deployed ROS Noetic nodes on RP2040 microcontrollers in C/C++ under Linux OS	

PROJECT EXPERIENCE

Michigan Advanced Robotics Competition	Ann Arbor, MI
Captain + Co-founder November, 2025 – Present	
<ul style="list-style-type: none">• Co-founded and led a multidisciplinary robotics team; recruited founding members, established team structure, and registered the group as an official project team under the college of engineering• Raised \$7,500+ in initial funding by pitching a clear technical roadmap to faculty, advisors, and program leadership• Built team infrastructure and set technical direction across software, mechanical, and electrical subteams• Leading development of a Supercapacitor Power Module providing smart power assist for a high-agility infantry robot	

University of Michigan Electric Boat	Ann Arbor, MI
Embedded Hardware Lead September, 2025 – Present	
<ul style="list-style-type: none">• Led design of cockpit and telemetry boards in Altium using STM32F4 for high-speed D-Stock boat racing application• Designed a two-layer rigid-flex cockpit PCB with low-noise routing, multi-rail power management (48V–3.3V), and BJT-based HV/LV LED indication• Impedance-matched GPS antenna routing and optocoupled CAN bus isolation to ensure signal integrity	

Steering System Lead August, 2024 – September, 2025	Ann Arbor, MI
<ul style="list-style-type: none">• Led the engineering of a lightweight hydraulics power steering and trimming system for 130+ mph tunnel hull boat maneuvers• Gained extensive hands-on experience with OnShape, AutoCAD, 3D printing, TIG welding & hydraulic hardlining	

Siemens Space Robotics Project x University of Michigan - x88 Program	Ann Arbor, MI
Software Engineer September, 2025 – Present	
<ul style="list-style-type: none">• Tested and calibrated OpenArm functionality through CAN and authored SOPs for software test and verification procedures• Developed SysML requirement, block definition, and internal block diagrams in Cameo/MagicDraw to capture system architecture, interfaces, and functional decomposition; maintained requirements traceability and requirement-to-verification mappings• Supported design reviews through requirements verification mapping, risk identification/mitigation tracking, and root cause analysis	

RESEARCH EXPERIENCE

Atombot Research Team, by ZLab at University of Michigan	Ann Arbor, MI
Embedded Hardware Engineer January, 2025 – January, 2026	
<ul style="list-style-type: none">• Designed and iterated RP2350B SoM board for robot joint actuator control with focus on signal integrity optimization• Implemented ground plane stitching, controlled impedance differential pairs (length matching) for proper noise mitigation	

Machining Manager March, 2025 – January, 2026	Ann Arbor, MI
<ul style="list-style-type: none">• Oversees, process and organize all manufacturing processes and machines of 10+ subteams• Automated 3D printing workflows in Notion and helped to build and improve the DMC2 Mini Mill• Practical experience in Vat Polymerization and FDM 3D printing	

CERTIFICATIONS, SKILLS & INTERESTS

• Languages: English (Bilingual); Mandarin (Bilingual); French (Limited Working Proficiency)
• CAD/Software: Altium; KiCad; LTSpice; OnShape; AutoCAD; Solidworks; SiemensNX (FEA); STAR-CCM+; NX NASTRAN; CATIA MagicDraw; Illustrator; Bambu Studio; Preform; Arduino IDE; Waveforms
• Programming: C++; C#; MatLab; ROS (noetic); Git; Julia;
• Manufacturing: Mill; Lathe; Aluminum & Steel TIG Welding; 3D Additive Printing; Resin Printing
• Interests: Basketball; Golf; Poker; Graphics Design; Drawing; Climbing