

Gavin Mocerì

Mechanical Engineering / Michigan Technological University

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Seeking a Summer 2027 CAD / mechanical design internship or co-op.

TECHNICAL SKILLS

CAD: SolidWorks, Onshape; assemblies/mates, dimensioned drawings/tolerances, configurations

CAM & CNC: Fusion, Estlcam; router setup, workholding, CNC operation; gSender

Fabrication: Bambu Lab 3D printers; machining polycarbonate, wood, aluminum, and SRPP

Additional: Basic Blender and Fusion CAD; AI-assisted web development

EDUCATION

Michigan Technological University

Expected May 2030

Bachelor of Science, Mechanical Engineering · Houghton, MI

Harbor Springs High School | GPA: 3.7

June 2026

ROBOTICS & LEADERSHIP

Member | Copper Country Robotics

Sep 2026 – Present

Michigan Technological University · Houghton, MI

- Led the design of an FTC robot that won an organization-wide Robot in 30 Hours competition one week after joining the club.

Mentor | Baywatch Robotics

Aug 2026 – Present

Harbor Springs High School · Harbor Springs, MI

- Designed learn.frc7790.com; developing offseason training assignments across CAD, fabrication, programming, strategy, electrical, and driver operations.

Captain & Design/Strategy Lead | Baywatch Robotics

May 2025 – Aug 2026

Member since 2023 · Approximately 15-member team · frc7790.com/mira

- Produced all CAD for the collaboratively designed 2026 robot; led cross-functional team coordination.
 - Designed a six-bar linkage intake with an extending hopper that successfully folded inward under impact.
 - Designed dual turreted shooters, built almost entirely from 3D-printed parts, with complex SolidWorks body geometry; both performed successfully on the robot.
- Independently designed the 2025 offseason robot and 2026 offseason CAD concept; co-designed the 2024 and 2025 competition robots.
- Independently designed and CAD-modeled a robot for WCP CADathon 2025 in one week.
- Created CAM toolpaths and set up workholding for AltMill MK2 and MPCNC routers; machined polycarbonate, wood, aluminum, and SRPP.

CAD PROJECT

Configurable FRC Shaft Assembly | Onshape

In progress

Developing a configuration-driven assembly of shaft components to streamline shaft creation in robot assemblies, with component variants selected through Onshape configurations.

WORK EXPERIENCE

Co-Founder | Avexel Web Design

Feb 2025 – Present

Harbor Springs, MI

- Co-delivered approximately 10 client websites through AI-assisted development; managed client requirements, responsive design, and delivery using React/TypeScript, HTML/CSS/JS, and Ruby on Rails.

Cart Barn Attendant | Harbor Point Golf Club

Jun 2024 – Present

Harbor Springs, MI · Seasonal, summers

- Maintained cart-fleet readiness and provided member and guest service during summer seasons.