

Aleksander Mateo Bobkov

ambobkov@outlook.com | 617-943-8575 | Dunstable, MA | linkedin.com/in/aleksander-bobkov

Summary and Education

Self-directed mechanical engineering student with **3+ years** of **CAD/CAM** and **project management** experience, taking an **award-winning FRC robot** from concept through fabrication. Now developing **AI engineering platforms** at Teradyne after wearable robotics research and product security work. Seeking product design and robotics roles that blend hands-on engineering with AI.

University of Massachusetts Lowell

Lowell, MA | Expected Graduation - 2028

Mechanical Engineering major | Robotics minor | Honors student

Shah Academy Scholar for Leadership and Innovation | Machining Club Treasurer (12/2025 - Present)

Experience

Teradyne, *AI Platform Engineering Intern*

North Reading, MA | 09/2026 - Expected 12/2026

- Received Teradyne's **AI Innovation Challenge Coin** for exceptional use of AI tools to improve productivity and drive impact.
- Architecting an **agentic hardware-test platform** for test-program creation and board-level fault diagnosis using schematics, skills, and MCP servers.
- Developing an **AI-assisted bug replication platform** for customer issue triage and remediation, designed to support **200+ engineers** and identify hardware-dependent cases.

Teradyne, *Product Security Engineering Intern*

North Reading, MA | 05/2026 - 09/2026

- Co-developed an internal **product security platform** that saved Teradyne **\$3.5M**; onboarded **four divisions**.
- Evaluated **four SAST/SCA vendors** through demos, trials, and proof-of-concepts; coordinated NDAs and wrote a selection proposal.
- Authored **customer-facing security guidance** on IEC 62443-4-2 and the EU Cyber Resilience Act.
- Became the **first intern to co-lead** Teradyne's summer software engineering outing with a **20-person team** for **100+ attendees**.

UMass Lowell NERVE Center, *Wearable Robotics Research Assistant*

Lowell, MA | 10/2025 - 05/2026

- Collaborated with **Ph.D. researchers** on wearable robotics and military assistive devices; supported participant trials.

FIRST, *FRC High School Robotics Team Mentor*

09/2025 - Present

- Mentor high school students on **two FRC teams** through the design and programming of semi-autonomous competition robots, guiding teamwork, project planning, and hands-on problem solving.

BAE Systems FOCUS Program, *Student Mentor*

2023 - 2024

- Guided a high school robotics group through an **11-week engineering program** using question-led instruction.

Projects

FIRST Robotics Competition Team 1277, *Robot Design and CNC Manufacturing*

2022 - 2025

- Designed the entire **2024 FRC robot** in Fusion 360, helping win the **Industrial Design Award sponsored by General Motors**.
- Programmed a CNC machine that had sat idle for **three years**, enabling the team's **first in-house machining** of aluminum, polycarbonate, and wood parts.
- Self-taught **CAD/CAM/CNC**, created training materials, and taught classes so teammates could design and machine parts.

Skills

Core Skills – Rapid prototyping | Project management | CAD/CAM | CNC machining | Laser cutting | SAST/SCA | vendor evaluation

Familiar Software – Fusion 360 | SolidWorks | Onshape | C | GitHub | Django | React | PostgreSQL | Docker | Kubernetes

AI Tools and Languages – Claude Code | GitHub Copilot CLI | MCP servers | English (fluent) | Spanish (advanced)

Hobbies and Interests – Tennis | Pickleball | Mountain Biking | Photography | Piano | Guitar