

ELIAS VANIER

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SUMMARY

Mechanical Engineering student at RIT with production engineering experience at Toyota and a track record of founding hardware ventures. Skilled in CAD, Python, robotics, and manufacturing processes including CNC, thermoforming, and additive manufacturing. Seeking full-time opportunities in mechanical design, manufacturing, or product engineering.

EDUCATION

Rochester Institute of Technology

B.S. Mechanical Engineering • Schedule A Eligible

Rochester, NY

Expected Fall 2026

TECHNICAL SKILLS

CAD & Simulation: SolidWorks, Autodesk Inventor, Fusion 360, OnShape, AutoCAD, Delmia, Antigravity

Programming & Tools: Python, GitHub, Visual Studio Code, Microsoft 365, Adobe Suite

Manufacturing: CNC machining, thermoforming, soldering, rapid prototyping

PROFESSIONAL EXPERIENCE

RIT AMPrint Center – Research Assistant

May 2024 – May 2025

Rochester, NY

- Engineered and programmed a custom 3-axis bio-printer with dual independent extruder heads using Python for multi-material tissue scaffold fabrication.
- Researched and programmed a laser galvanometer system, demonstrating expertise in precision optics and control systems.

Toyota Motor Corporation – Production Engineer Co-op

Aug 2023 – Apr 2024

Georgetown, KY & Liberty, NC

- Engineered 3 quality enhancements on a multi-million-dollar battery line, boosting productivity 25% and space utilization 80%.
- Integrated augmented reality into quality control, improving inspection efficiency by 45%.
- Designed a Toyota-spec 15-axis arc welding robot training cell, managing a \$250K project budget from concept through vendor selection.

ENTREPRENEURIAL VENTURES

Deaf LLC – Founder

Jan 2018 – Present

- Founded a D2C skateboard brand; generated \$10K revenue in 3 months selling 3,000+ custom paint pens nationwide.
- Developed electric skateboards with custom Kydex enclosures, managing lean production from prototyping through fulfillment.

CyclopsFPV – Co-Founder

May 2021 – Jan 2024

- Manufactured custom carbon fiber drones for professional videography; integrated LiDAR, optical flow, and GPS for autonomous flight.
- Optimized frames via topology optimization and generative design; grew brand to 300K+ global impressions.

LEADERSHIP & ACTIVITIES

757 Pitch Competition Winner | 757 Startup Studios Alumnus | RIT Society of Black Engineers | RIT Skate Club | RIT Swim & Dive Team (2022)