

KARL-Oskar Pajus

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PROFILE

Engineering student with an interdisciplinary background of technical skills both mechanically and computationally, entrepreneurship including stakeholder management and leadership, and analytics through quantitative modelling.

EDUCATION

Dartmouth College, Hanover, NH

Bachelor of Arts, Major in Mechanical Engineering

Bachelor of Engineering, Major in Mechanical Engineering

Masters of Engineering in Electrical Engineering

GPA 3.74 · Second Honors Group (Top 15%) June 2025

Expected June 2026

Expected June 2026

WORK EXPERIENCE

SKAD Scott Kitchen Architecture + Design, Hanover NH

June 2025-August 2025

Project Manager - Real Estate Development and Renovations

- Led renovations of a residential building, coordinating subcontractors and corresponding with engineers, owners and architects during a fast-paced 3-month development.
- Participated in design reviews across architectural, structural, mechanical, electrical, plumbing and septic systems.

Dassault Systèmes, Waltham, MA

June 2024-August 2024

SOLIDWORKS User Success Engineering Intern

- Organized and streamlined 2,000+ entries in the technical support database, enhancing information retrieval time.

- Mediated between clients and engineers to translate complex technical solutions to actionable recommendations.

Thayer School of Engineering, Hanover, NH

June 2022-Present

Machine Shop Technical Instructor

- Led a process-improvement project remodeling the Thayer Woodshop, collected inputs from students and faculty to optimize budget constraints and improve the workspace efficiency and safety.

- Supported 2-3 teams of engineers each term with consulting in fabrication, resource planning, and design.

ADDITIONAL PROJECTS

Design of a Modular SLS Printed UAV

September 2025-Present

- Designing a modular Group 2 drone chassis that has spare-on-demand capability and supports multiple mission profiles.
- Modelling (SolidWorks), tolerancing (GD&T), and Simulating (ANSYS) aerodynamic performance of the wings and control surfaces.
- Development of reliable connections for the wings and fuselage to achieve a rapid component replacement time of less than 1h.

Material Testing of 3D Printed Polymers

January 2024-March 2024

- Researched the structural properties of 3D-printed polymers to minimize material usage and maximize structural strength, processed data through MATLAB and Excel, and generated production instructions for more cost-efficient manufacturing.

SpikeEase Microspikes

January 2023-March 2023

- Identified challenges faced by the elderly through user interviews and market research, defining key product requirements.
- Co-led the design and prototyping of a hands-free traction system that reduced installation time by 8x compared to competitors.
- Completed detailed cost analysis and benchmarking to analyze market opportunity in a saturated assistive device market.

LEADERSHIP & ACTIVITIES

Tau Beta Pi Engineering Honor Society, Vice President

June 2025-Present

- Appointed VP of the Dartmouth chapter, coordinating society events, member activities and student advising.

Dartmouth Residential Education, Undergraduate Advisor/Residential Fellow

August 2022-Present

- Mentored Undergraduate residents by fostering academic engagement, wellness and community cohesion.
- Collaborated with faculty and campus leadership to set up discussions, workshops and other events to enhance student success.

Dartmouth Track and Field, Team Captain

August 2022-May 2025

- Elected captain for three years, guiding the 50+ members through coaching transition and sustaining team morale.
 - Awards: Academic All American, 1st All Ivy, Timothy Wright Ellis Memorial Award recipient

SKILLS, CERTIFICATIONS & HOBBIES

Software: SOLIDWORKS (CSWE, CSWP, 4 Advanced Certifications), C, MATLAB, ANSYS, Python, Excel, Microsoft Office

Technical Skills: CNC Milling, Lathe, 3D Printing, Welding, Hand Tools, Polymers, Laser Cutting, Robotics

Hobbies: Blacksmithing, woodworking, Rock-climbing, Cooking, Biking, Freediving