

Baxter Harrington

bwharrington06@gmail.com | [linkedin.com/in/baxharr](https://www.linkedin.com/in/baxharr) | github.com/bharrington006

Portfolio: baxterharrington.com

EDUCATION

Washington University in St. Louis | McKelvey School of Engineering

Class of 2028

B.S. in Mechanical Engineering | Minor in Human-Computer Interaction

GPA: 3.88/4.00

Coursework: Solid Mechanics, Fluid Mechanics, Differential Equations, Machine Elements, Thermodynamics, Materials Science, Intro to Computer Science (Java), Web Development

PROJECTS & EXPERIENCE

SO-101 Robotic Arm Project

Summer 2026 - Present

- Built and calibrated a LeRobot SO-101 leader-follower robotic arm system from open-source hardware designs.
- Collected an imitation-learning demonstration dataset via teleoperation and trained Action Chunking Transformer (ACT) policies for a simple block manipulation task.
- Identified depth perception failure mode within the dataset, and increased success rate from 0.32 to 0.68 over 50 trials after training a new policy with a redesigned, self-fabricated camera mount.
- Developing custom environments in Gymnasium for SO-101 block manipulation to train reinforcement learning policies in simulation for sim-to-real transfer to the SO-101.

University Rover Challenge | Science Team Member → Team Lead

Fall 2025 - Present

- Leading a 6-person science team toward the May 2027 competition in Southern Utah.
- Designing a soil-collection and testing module for a Mars rover from the ground up, integrating robotic mechanisms and chemical tests for in-situ analysis.
- Prototyped the sample collection system during the 2025-2026 academic year, using SolidWorks and 3D printing to develop proof of concepts for both surface and deep-soil extraction mechanisms.

Konica Minolta Business Solutions | Information Technology Intern

Summer 2026

- Facilitated discovery interviews across 3 business units to surface jobs-to-be-done for an agentic AI (Salesforce Agentforce) rollout.
- Synthesized findings into 4 shared pain points and matching agent designs.
- Prototyped all 4 agent concepts as interactive HTML mockups using Claude Design, then returned to the same interview participants for 30-minute validation sessions.

Addison Central School District | Technology Support Intern

Summer 2025

- Configured and deployed 500 new computers and refurbished 500 computers for redistribution, using imaging tools, BIOS configuration, and diagnostic utilities.

SKILLS

Robotics & Embodied AI: Gymnasium, LeRobot, imitation learning (ACT), teleoperation data collection

Mechanical Engineering: SolidWorks (CAD, simulation/FEA), 3D printing/rapid prototyping, machining (mill, CNC, lathe)

Experience Design & Research: discovery interviews, usability/validation testing, Figma, Claude Design

Programming: Python, PyTorch, Java, JavaScript, HTML/CSS, MATLAB, Git

LEADERSHIP & ACTIVITIES

KEYS Volunteer Piano Lessons | Treasurer

Fall 2025 - Present

- Managing finances for social events, educational materials, and recitals of a WashU club that brings free piano lessons to kids who otherwise wouldn't have access to high-quality music education.

Club Lacrosse | Treasurer

Fall 2025 - Spring 2026

- Managed finances for travel, games, and equipment of a 30-person team.

INTERESTS

Cross country skiing, Formula 1, piano, Rubik's Cube (personal best 14 seconds)