

Eris Pil

Boston, MA | +1 (412)-370-9336 | erispil@bu.edu | erispil.com

EDUCATION

Boston University - Boston, MA

B.S. in Mechanical Engineering, Minor in Mathematics, Manufacturing Concentration | 3.67 GPA | Expected May 2028

Relevant Coursework: Electromechanical Engineering, Thermodynamics, Electric Circuits, CAD & Machine Components, Computer Science, Linear Algebra, Complex Variables, Probability

Activities: BU Community Gardens, BU Rocket Propulsion Group, BU Urban Birding Club

Winchester Thurston High School - Pittsburgh, PA

High School Diploma | 4.0 GPA | June 2024

Advanced Placement Exams: Chemistry, Calculus AB, Calculus BC, Statistics, Language & Composition, Physics, US History

Additional Coursework: Advanced French, Multivariable Calculus, Urban Research & Design, Altruistic Engineering & Design

TECHNICAL SKILLS

- **CAD:** SolidWorks, Fusion 360, Onshape
- **Fabrication:** Manual Mill and Lathe, CNC Mill and Lathe, Sheet Metal, 3D printing, Laser Cutting, Technical Drawings, Graphic Design
- **Programming & Data:** Arduino programming/C++, Python, G-Code, MATLAB, LaTeX, Excel/Google Sheets

PROJECTS

3D Cutter

- Designed and built a 3-axis CNC cutter
- Developed a custom G-code interpreter and stepper-driven Cartesian motion system

Infrared Communication Device

- Engineered and built a short-range, portable infrared communication device that transmits and receives character-based input
- Constructed and 3D-printed durable housing, built circuitry and wrote signal encoding/decoding software, achieving 100% successful transmission over 10+ feet

Electromechanical Cart

- Created a variable distance cart utilizing a modified bang-bang motor control
- Furthered understanding of DC motor control and the trade-offs between speed and balance

EXPERIENCE

Engineering Product Innovation Center- Boston, MA | May 2026 - Present

Lab Assistant (Machine Shop Assistant)

- Maintain and organize machine shop equipment to ensure a safe, operational engineering facility
- Train and assist patrons in machining custom components while teaching proper manufacturing techniques
- Lead facility tours for visitors, stakeholders, and prospective students to showcase advanced manufacturing capabilities and foster community engagement

Boston University- Boston, MA | Aug 2026 - Present

Learning Assistant: Engineering Mechanics 1

- Mentored students in core engineering principles by breaking down highly technical concepts into accessible, actionable learning steps
- Partnered with graduate instructors to facilitate weekly discussion sections, guiding undergraduate peers through complex engineering concepts
- Collaborated weekly with faculty to align instructional strategies, monitor student comprehension, and provide targeted academic support

The Andy Warhol Museum - Pittsburgh, PA | Dec. 2022 - May 2024

Youth Arts Council Member

- Designed and delivered public arts programs for teen audiences (100–400 attendees per event)
- Developed youth-focused marketing materials, delivered gallery talks, and collaborated with local artists
- Supported donor engagement and contributed to Carnegie Museum system's initiatives to expand youth participation

Artists Image Resources (AIR) - Pittsburgh, PA | Jan. 2023 - June 2024

Youth Open Studio Entrepreneur

- Produced and printed promotional materials (ads, T-shirts) for local performances and community events
- Built strong proficiency in Adobe Photoshop, graphic design workflows, silkscreen production, and print methods

Farm and Wilderness Camps - Plymouth, VT | Summers 2023 - 2025

Camp Counselor, Waterfront & Creative Arts Staff, Apprenticeship Manager (Waterfront & Printing)

- Led and mentored a cabin of tweens (2023) and teens (2024, 2025), supporting socio-emotional development and community building; collaborated with a team of other cabin leaders on programming and events to foster a cohesive, positive camp environment
- Taught swim instruction and canoe/kayak fundamentals; prioritized safety, clear communication, and progressive skill building
- Led multi-day wilderness trips (up to 5 days), teaching campers navigation across woods and lakes, campsite setup, meal preparation, and group collaboration, fostering high camper engagement
- Managed a three-week dyeing and printing apprenticeship: built lesson plans and materials lists, delivered hands-on training in cyanotypes, screen coating/exposure/printing, negative creation, natural and reactive dyes

CERTIFICATIONS

- **Lifeguarding Instructor** - American Red Cross (Cert. ID: 027F430) | Expires Mar. 2028
- **Lifeguarding (Deep Water)** - American Red Cross, CPR/AED for Professional Rescuers, First Aid, Waterfront Skills (Cert. ID: 0285KJJ) | Expires Mar. 2028
- **Wilderness First Responder** - Wilderness Medical Associates (Course ID: 33711) | Expires Mar. 2027

ADDITIONAL SKILLS

- Group instruction, multilayer screen printing, dyeing, photography, and light-reactive printing processes
- Photography Awards include: Royal Meteorological Society, Carnegie Libraries Labsy Award, and multiple Scholastic Arts Awards