

James Utley

Electrical Engineer and Data Scientist with diverse background in Classical Language & Literature.

Belmont, MA | [linkedin.com/in/utley-james](https://www.linkedin.com/in/utley-james) | Portfolio: <http://james-utley.com/> | GitHub: jam-utley

EDUCATION

Boston University College of Engineering

M.S. in Electrical Engineering, Concentration in Artificial Intelligence, Robotics

Boston, MA

Expected May 2026

University of Michigan, College of Literature, Science, & Art

B.A. in Major: Classical Languages & Literature, Major: Art History

Ann Arbor, MI

April 2023

Minor: Museum Studies | *Magna Cum Laude*

SKILLS

Computer: Python, PyTorch, eGui, Tkinter, Rust, C/C++, MATLAB, Arduino, Computer Aided Design: Onshape, Creo, SolidWorks, KiCAD, AutoCad, API software integration, Signals, Systems

Manufacturing: Soldering, Lathe, Drill Press, Laser Cutter, 3D Printing

Business: Microsoft Office, Google Office Suite, Adobe Creative Cloud

Languages: French, Spanish, German, Latin, Ancient Greek

PROJECTS

EYESIGHT – Live Video AI

October 2025 – December 2025 | Boston, MA

- Utilized PyTorch to perform QLoRA on Microsoft's open source Florence2 to assess the efficacy of VLM for real-time object detection and object character recognition.
- Created and annotated a dataset of 813 images of door panels to finetune our Florence2 model.
- Performed tests on real-time video and analyzed the data to determine project success.

ANGLER ROV Submersible

July 2025– Aug 2025 | Boston, MA

- 3D modeled, printed, and iterated individual parts and overall design of the ROV in OnShape.
- Primary lead for circuit design and integrating telemetry using Arduino and C++.
- Ensured signal strength along underwater cable to pass data between the handheld controller and the ROV.

Blackjack Simulator and Probability Calculator

June 2025 | Boston, MA

- Developed probability functions and a GUI (egui) in Rust to simulate a game of Blackjack and provide the player with updating probabilities of failure.
- Optimized Rust code for efficiency, dealing with crashes and bugs in a team oriented approach.
- Project team lead; focus on GUI design and project integration.

RELEVANT COURSEWORK

Image Reconstruction and Restoration – Spring 2026

Intro to Software Engineering – Summer 2025

Linear Algebra – Fall 2025

Dynamic Programming and Reinforcement Learning – Spring 2026

Electrical Circuits – Spring 2025

Multivariate Calculus – Summer 2025

High Performance Programming with Multicore and GPUS – Spring 2026

Signals and Systems – Spring 2025

Differential Equations – Spring 2025

Deep Learning – Fall 2025

Intro to CAD – Fall 2024

Calculus 2 – Fall 2024

Intro to Learning from Data – Fall 2025

Intro to Programming – Fall 2024

Physics 1 – Fall 2024

Probability, Statistics, and Data – Spring 2025

EXPERIENCE

MS Admissions Ambassador, Boston University

Jan 2026 – Present | Boston, MA

- Communicated with prospective students, answering questions.
- Facilitated open houses, guiding students and families between events.

MBA Writing Assistant, Questrom School of Business

Sept 2024 – Dec 2024 | Boston, MA

- Provided personalized writing assistance and tutoring to MBA students.

Robotics Instructor, Dearborn Heights Montessori

Jan 2021 – May 2021 | Dearborn Heights, MI

- Taught course on programming of LEGO Mindstorms EV3 robots to middle school students.
- Mentored students in robots, logic, programming, and collaborative development.