Evan Smith

Bedford, NH | evangibsonsmith@gmail.com | (207)-852-3910 | evangibsonsmith.com

linkedin.com/in/evangibsonsmith | github.com/evangibsonsmith

Education

Worcester Polytechnic Institute

Degrees:

Master of Science in Electrical and Computer Engineering, GPA: 4.00/4.00 Bachelor of Science in Electrical and Computer Engineering, GPA: 4.00/4.00 Bachelor of Science in Computer Science, GPA: 4.00/4.00

Experience

Incoming Cyber Research Intern, Peraton Labs – Bedford, NH June 2025 – August 2025

Electrical Engineering Teaching Assistant, Worcester Polytechnic Institute March 2024 – Dec 2024

- Worked with Professors Asheghan and Makaroff for 10 hours weekly over D Term 2024 and B Term 2025.
- Assisted students in lab in troubleshooting circuits.
- Helped students understand relevant content through lab and supplementary lectures.
- Managed grading and equipment for students in lab.

Undergraduate Research Assistant, Worcester Polytechnic Institute May 2024 – June 2024

- Worked 40 hours a week under Professor Whitehill to determine the effectiveness of Bayesian Optimization with the Gaussian Process on basic particle simulations.
- Developed a basic particle simulation in Java and analysis in Python, with highly flexible starting conditions for optimization.
- Implemented Bayesian Optimization and random grid search to statistically compare techniques.
- Analyzed hyperparameter effects on optimization performance, producing a report on kernel selection, seeded points, and beta values for Upper Confidence Bound, finding slight but statistically significant improvement over random grid search.

Sound Engineering Summer Intern, Main Street Music Studios – Brewer, ME June 2023 – August 2023

- Collaborated with clients to produce high-quality recordings and mixes, addressing specific client needs and feedback.
- Set up and broke down the studio for recording with various instruments and artists.

Projects

Coronal Hole Classification

October 2024 – March 2025

November 2024 - December 2024

August 2022 - May 2026

- Designed a SAM-based approach to create CHASM, a dataset spanning 1,400+ masks for coronal hole classification
- Trained a state-of-the-art model on CHASM dataset, achieving a 100% increase in intersection over union (IoU) between masks

Genre Shifter

- Developed and evaluated a novel architecture for genre transformation using a dataset of 2,000 audio clips
- Preprocessed into mel spectrograms to apply convolutional architecture to balance genre shifter and reconstruction loss
- Performed quantitative analysis on results over hyperparameter values to determine efficacy of model architecture

Uncovering the Bar Island Trail: A Study on Visitor Dynamics

- Designed system to gather GPS data for 138 visitors, administered surveys to 133, and conducted 44 interviews.
- Developed and implemented method of collecting granular, 10-minute visitor data over 15 days for both the island and sandbar.
- Found roughly 250% increase in visitation since 2006; 82% of visitors were first-timers, and 51% were unaware of the critical tide window for return.
- Collaborated with Acadia National Park and Friends of Acadia to analyze the data and provide actionable recommendations, including trail signage updates, new trail development, and restoration area suggestions.

Concert Venue Manager

- Collaborated in a small team to design and develop a mock concert venue website, using Git for version control and team collaboration.
- Utilized AWS services for deployment and management, integrated an SQL database for backend storage, and built dynamic front-end components using React.

Bananagrams Board Game Solver, Personal

• Created a heuristic solver by developing a custom modified A* in Java to solve the board game Bananagrams

Organizations

President, Upsilon Pi Epsilon Massachusetts Alpha Chapter

- Host 2 community service, 2 internal activities/workshops, and 1 destress event quarterly, as well as an annual career fair.
- Run community events including resume builders, mock interviews, destress activities, and club meetings.
- Work with external companies and successful members of the community in Computer Science to run company and career development talks on campus.

Electronics Sub-team Lead, Autonomous Underwater Vehicle Club

- Led a team of students to design the electrical system of autonomous underwater vehicle from the ground up, including two lithium-ion batteries, two MCs, IMUs, a camera, 3 leak sensors, and control of 8 thrusters.
- Worked with members to teach relevant skills like Git, PCB Design, and electronic design.

Interim President, Autonomous Underwater Vehicle Club

- Organized high level objectives for each sub-team to meet goals in desired timeframe.
- Acquired funding through sponsors and student government for project.
- Ran weekly sub-team lead meetings and general body meetings to identify points for improvement.

Treasurer, Eta Kappa Nu Gamma Delta Chapter

- Manage finances for Eta Kappa Nu for member inductions, fundraisers, and social events.
- Revitalized the weekly Pizza Friday event for electrical and computer engineering community and fundraising.

High Powered Rocketry Club, Electronics Design Team

- Helped design schematics for PCB to mount on a high-powered rocket, record telemetry data, communicate through radio via XBee, and control actuators.
- Designed intelligent debugging protocols with jumper wires, LEDs, and breakout GPIO pins.
- Placed and routed components with a focus on the STM32 microcontroller, XBee Radio, and debugging GPIOs and LEDs.

Jazz Ensemble Pianist

Web Secretary, Upsilon Pi Epsilon Massachusetts Alpha Chapter

- Managed and updated UPE website, keeping track of member activity and updating relevant pages using nginx.
- Advertised and provided information for companies on the 2024 Honor Society Career Fair.
- Designed visual materials such as event flyers, career fair advertising, and slides.

March 2025 – Present

March 2024 – Present

October 2023 - Present

November 2024 – December 2024

December 2024 - March 2024

January 2025 – Present

June 2024 – August 2024

September 2024 – Present January 2024 - January 2025

January 2025 - Present