Natalie Kozlowski

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EDUCATION

Massachusetts Institute of Technology (MIT) *Cambridge, MA*

- B.S. in Electrical Engineering & Computer Science *anticipated May 2028*
- **GPA:** 5.0/5.0
- **Relevant Coursework:** Discrete Math, Fundamentals of Programming, Circuit Design, Linear Algebra
- **Societies:** Women in EECS, Society of Women Engineers, AI @ MIT

Westlake High School *Austin, TX*

- **Class Rank:** valedictorian in class of ~700 students, **SAT:** 1600/1600, **ACT:** 36/36 *May 2024*

SKILLS

Programming: Python, C++, Java, JavaScript, Bash, R
Tools & Infrastructure: Git, Slurm (High Performance Computing job scheduling), Linux shell
Machine Learning Libraries: PyTorch, scikit-learn
Engineering Software: Altium Designer (Altium Education Certificate in PCB Design), SOLIDWORKS, Ansys
Languages: English (native), Polish (native), Spanish (working proficiency & Seal of Biliteracy)

WORK EXPERIENCE

Researcher: Machine Learning & Computational Science *May 2025 - present*
Kulik Research Group @ MIT *Cambridge, MA*

- Building ML models in Python (Artificial Neural Network (ANN), Gradient Boosted Decision Tree, Kernel Ridge Regression) using PyTorch & scikit-learn to predict water transport in metal-organic frameworks
- Implemented latent space active learning workflow for an ANN, improving model performance by 40% on test data
- Conducted 2,000+ molecular simulations on Linux High-Performance Computing cluster
- Automated workflows with Python, Slurm, & Bash to manage high-throughput molecular simulations

Researcher: Machine Learning & Signal Processing *September 2025 - present*
Fluid Interfaces Group, Media Lab @ MIT *Cambridge, MA*

- Building end-to-end signal processing pipelines in Python for multimodal EOG, EEG, & EMG data
- Developing ML models in Python using PyTorch & scikit-learn to predict user's cognitive state for integration with wearable brain-computer interface devices

Intern: Software & Lab Research *February 2025 - August 2025*
Endless Health *Austin, TX (remote Feb-May, in-person June-Aug)*

- Developed Python pipelines to automate processing & analysis of diagnostic lab data, boosting assay validation efficiency & supporting expansion of clinical hormone panel by 5 biomarkers
- Designed & optimized experimental protocols for quality testing of 5 novel biomedical assays, leading to their successful integration into company product offerings

LEADERSHIP & ACTIVITIES

Software Developer *August 2025 - present*
Assistive Technology @ MIT *Cambridge, MA*

- Collaborating with ~20-person team to design & program adapted gaming controller for user with disabilities

Electrical Engineer *September 2024 - present*
Solar Electric Vehicle Team @ MIT *Cambridge, MA*

- Manufacturing & testing 768-cell Li-ion battery module to power multi-occupant solar electric vehicle
- Built simulation workflows for computational fluid dynamics in Ansys to model thermal performance of battery module, verifying module safety under peak charging conditions
- Collaborating with mechanical & aerodynamics subteams to integrate battery & controls with vehicle-wide systems

Teaching Assistant for Differential Equations *August 2025 - present*
Department of Mathematics @ MIT *Cambridge, MA*

- Providing individualized feedback on 250+ problem sets per week, supporting student learning outcomes in fundamental engineering coursework