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EDUCATION

Massachusetts Institute of Technology (MIT) *Cambridge, MA*
- B.S. in Electrical Engineering & Computer Science *anticipated May 2028*
- **Relevant coursework:** Math for CS (Discrete Math & Probability), Linear Algebra, Fundamentals of Programming, Circuit Design, Differential Equations, Physics (Mechanics, E&M)
- **Societies:** Voltage (EE subcommittee of MIT's IEEE/ACM chapter), Society of Women Engineers
- **GPA:** 5.0/5.0

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

SKILLS

Programming: C/C++, Python, Java, JavaScript, Bash/Linux shell, Git, R
Engineering Software: Altium Designer (Altium Education Certificate in PCB Design), SOLIDWORKS, Ansys, Arduino
Machine Learning libraries: PyTorch, scikit-learn
Languages: English (native), Polish (native), Spanish (working proficiency & Seal of Biliteracy)

WORK EXPERIENCE

Researcher: Machine Learning & Computational Chemistry *May 2025 - present*
Kulik Research Group @ MIT *Cambridge, MA*
- Developing ML models (ANN, Gradient Boosted Decision Tree, Random Forest, Kernel Ridge Regression) using PyTorch & scikit-learn to predict water transport properties of metal-organic frameworks (MOFs)
- Managing high-throughput simulation workflows using Python, Slurm, & Bash scripting in Linux shell
- Conducting molecular dynamics & Monte Carlo simulations on high-performance computing cluster

Intern: Software & Laboratory Research *February 2025 - August 2025*
Endless Health *Austin, TX*
- Developed software tools in Python to automate processing of diagnostic lab test data
- Designed & optimized experimental protocols for testing 5 new biomedical diagnostic assays

LEADERSHIP & ACTIVITIES

Battery Manufacturing Lead *September 2024 - present*
Electrical Engineering Subteam, Solar Electric Vehicle Team @ MIT *Cambridge, MA*
- Leading manufacturing of 768 cell Li-ion battery module to power multi-occupant electric vehicle
- Leading computational fluid dynamics simulations of battery cooling systems in Ansys
- Collaborating with mechanical & aerodynamics subteams to integrate battery with other car systems

Differential Equations Teaching Team *September 2025-present*
Department of Mathematics @ MIT *Cambridge, MA*
- Selected to mentor students to support learning outcomes in fundamental engineering coursework
- Evaluating & providing detailed feedback on weekly problem sets

PROJECTS

Deep Learning for EMG Signal Processing
- Trained convolutional neural network using PyTorch for gesture classification from raw EMG data

Flex Sensor-Controlled Biomechanical Actuation System
- Developed ESP32 firmware in C (ESP-IDF) to interface a flex sensor with a servo motor for biomechanical actuation

Audio Processing & Visualization in C++
- Implemented Fast Fourier Transform algorithm for real-time audio visualization in C++