Evan Ward Dietrich

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EDUCATION

Tufts University, Medford MA
B.S. Computer Science, B.S. Cognitive and Brain Sciences, expected May 2021
- Major GPA: 3.78; Recipient of the Edgar N. and Faith A. Johnson Scholarship, Dean's List

Relevant Coursework
- Algorithms, Data Structures, Machine Learning, Machine Structure & Assembly Language, Statistics, Discrete Mathematics, Cognitive and Brain Sciences, Logic, Linguistics, Programming Languages

EXPERIENCE

MIT Lincoln Laboratory, Lexington MA
Software Engineering Intern, May 2019 — August 2019
- Designed and developed automated software system in C++ to set hardware configurations and run calibration tests on lasercom terminals, replacing manual procedures and reducing costs.
- Implemented and tested signal processing algorithms to make real-time corrections on transmissions.

Tufts University Department of Computer Science, Medford MA
Senior Teaching Assistant, January 2018 — Present
- Instruct weekly 2-hr labs on fundamental concepts and data structure implementations.
- Hold office hours for 275 students in Intro to CS and Discrete Math courses to support projects.

Tufts University Spatial Cognition Laboratory, Medford MA
Research Assistant, May 2018 — February 2019
- Executed statistical analysis in R and produced scripts to save time evaluating large-scale datasets.
- Authored 30 pages of manuscript on boosting STEM aptitude via spatial visualization training.

Tufts University Human-Robot Interaction Laboratory, Medford MA
Research Assistant, January 2018 — April 2018
- Devised new Python methods for a neural network modeling language-switching costs for bilinguals.
- Built a GUI to run the model, expediting evaluation time and simplifying user-computer interaction.

PROJECTS

ENVOY: Real-Time ASL-to-English Communication System, Cambridge MA
Project Leader and Research Affiliate, June 2019 — Present
- Create machine learning models that identify features of hand shapes, movements, and facial expressions from video to convert American Sign Language into English.
- Lead team of 6 interns to win full funding from MIT through the I3C Competition.

Tufts Brain-Computer Interface Team, Medford MA
Founder and Project Manager, February 2019 — Present
- Direct a dozen students in designing and fabricating EEG headsets to measure human brain activity.
- Produce software to detect distinct brain states and prototyped industry and medical applications.

SKILLS

Languages Python, JavaScript, C++, CSS, HTML, Java, MATLAB, C, R
Technologies Agile Framework, Git, SPSS Statistics, TensorFlow, UML, Qt, Bash, Valgrind