

Evan Dietrich

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EDUCATION

Tufts University

Medford, MA

B.S. in Computer Science, B.S. in Cognitive Brain Science; GPA: 3.6

May 2021

Honors: Edgar N. and Faith A. Johnson Scholarship, Dean's List

Select Coursework: AI, Algorithms, Data Structures, Machine Learning, NLP, Machine Structure & Assembly Language, Statistics, Linear Algebra, Discrete Math, Computer System Security, Programming Languages, Logic

EXPERIENCE

JPMorgan Chase & Co.

New York, NY

Software Engineering Intern

Jun 2021 – Present

- Developing a markets application on the Athena platform, streamlining options execution and supporting ad-hoc requests for commodities and energy trader teams within the corporate and investment bank. (*Python, TypeScript*)

Software Engineering Intern

Jun 2020 – Aug 2020

- Designed, created, and launched a mobile-first web app for real-time messaging and virtual appointment setup, supplying a nonprofit partner with a secure connection to 4500+ small-business clients. (*Bootstrap, Django, SQL*)
- Built quantitative clustering model to detect at-risk clients and generate personalized client feeds based on financial data and site activity, increasing client engagement metrics to 83% from 20% benchmark. (*Python, SQL*)

Massachusetts Institute of Technology (MIT)

Cambridge, MA

Student Technical Researcher

Aug 2019 – May 2021

- Engineered machine learning pipeline to extract hand and facial features from American Sign Language video data in support of translation to English phrases, reducing aggregated signer variance from 34% to 8%. ([Poster](#))
- Trained and deployed scalable deep learning models using CNN architecture and seq2seq techniques, achieving 94% translation accuracy on a robust NLP lexicon of emergency phrases. (*Keras, Python, TensorFlow*)

MIT Lincoln Laboratory

Lexington, MA

Software Engineering Intern

May 2019 – Aug 2019

- Designed and developed multi-threaded software system to set hardware configurations and run calibration tests on lasercom terminals, replacing 3-week manual testing with 12-hour automated calibration. ([Poster](#))
- Programmed and tested REST API, request-handler, and user interface components of client-server system, increasing accuracy of real-time optical transmission corrections by 3.7x. (*C++, MATLAB*)

Tufts University Department of Computer Science

Medford, MA

Senior Teaching Assistant

Jan 2018 – Dec 2020

- Led office hours and curriculum design for graduate students taking Computational Models in Cognitive Science.
- Instructed weekly 2-hr labs on data structure implementations in Discrete Math and Intro CS. (*C++, Python*)

Human-Robot Interaction Laboratory

Medford, MA

Machine Learning Research Assistant

Jan 2018 – Apr 2018

- Coded GUI display and extended functionality of neural network modeling language switching cost for bilinguals, optimizing total model evaluation time by 83%. (*Python, PyQt*)

LEADERSHIP

Code for Equity Fellow, Impact Labs – Led 6-person team developing graph algorithms to track misinformation spread on social media. (*NLTK, Python*)

Undergraduate Representative, Tufts Computer Science Council – Resolved student-departmental concerns with professors, ensuring CS program is equitable to all students.

PROJECTS

Loan Repayment Likelihood: Built regression model predicting loan repayment via client data, winning hackathon.

Brain-Computer Interface: Wrote artifact-correction algorithm removing heartbeat and muscle noise from EEG data.

SKILLS

Languages: Python, C++, SQL, Java, R, C, JavaScript, HTML/CSS, MATLAB, TypeScript

Technologies/Frameworks: Linux, AWS, Git, Django, Flask, jQuery, TensorFlow, Node.js, Stata, Scikit-learn, Keras, Agile, NumPy, React