Gregory Friedman

Storrs, Connecticut · gregoryfriedman.com · linkedin.com/in/gjfriedman · github.com/GregoryF27 · friedmang27641@gmail.com

Education

University of Connecticut, Storrs, Connecticut — expected May 2027
Bachelor of Science in Computer Science (School of Engineering) — GPA: 3.93 / 4.0
Bachelor of Arts in Mathematics (College of Liberal Arts & Sciences); Minor: Linguistics
Study abroad: England, Spring 2025: artificial intelligence, computer vision, and text analytics coursework

Experience

Software / ML Intern, Ametek Zygo — 2026 – present
– LLM-integrated material cost estimation backed by a full machine-learning pipeline; physics-simulation software supporting optical-coating test workflows.

Data Engineering Intern, Emerging Tech & Innovation, The Hartford — May 2025 – Aug 2025
– Built deployed ML model-monitoring pipelines on AWS (S3, Lambda, SageMaker) with Arize AI for real-time data-drift detection in fraud models; automated ingestion and batch processing with Airflow DAGs.
– Tuned CNN hyperparameters with error-level-analysis preprocessing, reaching 92.8% precision on manipulated-image detection; implemented regex-based EXIF metadata parsing and fraud-scoring heuristics.
– Presented findings to senior leadership, informing decisions on AI model deployment and fraud mitigation.

Undergraduate Machine Learning Researcher, University of Connecticut — Jun 2024 – Jan 2025
– Developed supervised models (XGBoost, Stone Soup ecosystem) predicting the duration of maintenance periods for U.S. Navy ships.
– Built a real-time aircraft geolocation pipeline (scipy, cvxpy) for classification of aircraft by ID and prediction of future positions.

Undergraduate Teaching Assistant, University of Connecticut — Sep 2023 – Dec 2024
– Led lab sections for Data Structures & Object-Oriented Programming (Python) and for graduate-level Introduction to Machine Learning, guiding cohorts of 25; guest-lectured to groups of up to 50.
– Wrote study materials, ran interactive study sessions, graded homework and exams, and tutored: from algorithmic analysis through supervised and unsupervised learning and neural networks.

Tutor, Quantitative Center, University of Connecticut — Mar 2023 – Oct 2024
– Tutored ∼8 hours weekly across Precalculus, Calculus I–II, Multivariable & Vector Calculus, Differential Equations, Physics I–II, and Linear Algebra; named tutor of the week after four weeks.

Projects

– **The Living Atlas**: personal academic site of essays, lectures, and interactive figures. gregoryfriedman.com
– **ML from the Ground Up (pyml)**: from-scratch machine-learning implementations with derivations. gregoryfriedman.com/lectures
– **Etymology Graph Explorer**: word histories across English, Spanish, and Russian. gregoryfriedman.com/projects/etymology-explorer
– **YQuantum Hackathon** (April 2024): sparse quantum state preparation algorithm implemented with Classiq. github.com/GregoryF27/YQuantum2024-Classiq

Skills

Languages	Python, C, C++, R, Java, Haskell, SQL (MS SQL Server / MySQL)
ML & data	NumPy, Pandas, SciPy, PyTorch, scikit-learn, XGBoost, OpenCV, NLTK, Matplotlib, Numba, BeautifulSoup
Infrastructure	AWS (S3, SageMaker, Lambda), Git, Linux/Bash, LaTeX, ArcGIS, HTML/CSS

Languages

English (native); Spanish and Russian (production & interpretation)

Honors

Upsilon Pi Epsilon (computing) · Eta Kappa Nu (IEEE) · Tau Beta Pi (engineering) · Dean's List, six semesters