Jake Pappo

480 Beacon St, Boston, MA 02115 • 781-799-7290 • jakepappo@college.harvard.edu

EDUCATION

Harvard University | GPA: 3.9

Cambridge, MA

A.B. in Statistics (Data Science track), Minor in Classics

Expected June 2025

Coursework: Machine Learning, Data Science, ML Ops, Probability, Lin Alg, Statistical Inference, Economic History

Belmont Hill School | GPA: 4.54, ACT: 36

Belmont, MA

Regeneron Semi-Finalist, US History Term Paper Prize, Three-sport Varsity Athlete

June 2020

EXPERIENCE

Sauron *Machine Learning Engineer*

San Francisco, CA

Jan 2024 – Aug 2024

Sauron is innovating the home security market by integrating military-grade technology into consumer products.

- Developed and deployed sensor fusion models for real-time object detection, tracking, and 3D mapping
- Led the creation of the company's data pipeline, from collection and labeling to fine-tuning and evaluation
- Recruited as employee #2 by CEO Kevin Hartz (co-founder, Eventbrite and A* Capital) prior to \$18M seed round

Harvard Business School

Boston, MA

Research Assistant under Josh Lerner (Professor in PE, VC, and Entrepreneurship)

Jan 2023 - Jan 2024

- Helped formulate a framework for sustainable and financially motivated investments in the private sector
 - o Drafted case studies on deals across different natural asset classes (book in progress)
- Researched the Web3- and crypto-equivalents of traditional startups and venture capital firms

Dent Wizard

Business Intelligence

Jun 2023 – Aug 2023

- Created dashboards to track, monitor, and analyze performance metrics for the company's nationwide locations
- Presented findings to executive management to inform data-based decisions in pursuit of our \$1B revenue goal

TrailerCentral

Data Analyst

Jun 2022 – Aug 2022

- Developed an algorithm to calculate fair market value and assign price ratings to >1 million e-commerce listings
- Designed specialized reports based on industry data analysis for internal use and external commercialization

Mass General Hospital, Department of Neurosurgery

Boston, MA

Carter-Balaj Research Lab Member

Sep 2018 – *May* 2020

- Engineered a real-time minimally invasive brain cancer diagnostic that identifies mutant mRNA in glioma cells
- Selected as a national Regeneron Science Talent Search Scholar for my research

TECHNICAL SKILLS & PROJECTS

Advanced: Python, R, PowerBI; **Proficient:** SQL, C++, HTML/CSS

ML Techniques: FFNs, CNNs, RNNs, transformers; linear regression, PCA, random forests, gradient boosting

Sentiment Analysis of Audio Recordings

Spring 2024

- Predicted a speaker's emotion, out of 8 total, with deep learning models trained on 1,500 labelled recordings
- Achieved >50% accuracy with a custom transformer model and >60% by fine-tuning Meta's Wav2Vec model

Partisan Clustering of Subreddit Networks

Spring 2024

- Built and visualized the network of subreddits that originates from Reddit's "Politics" page
- Presented final poster on Reddit's polarizing recommendation algorithm at Harvard's "AI @ FAS Symposium"

Predicting Stock Price Variation

Fall 2023

- Achieved 75% accuracy in predicting whether stocks rose or fell YoY with financial data on over 4,000 tickers
- Crafted a data processing pipeline and trained multiple ML models (regression, random forest, boosting, stacking)

EXTRACURRICULARS

Harvard Financial Analysts Club

- Developed a foundational knowledge in accounting, financial statement analysis, and valuation methodologies
- Participated in stock pitch competitions, honing skills in researching, assessing, and presenting investments

Harvard Undergraduate Think Tank (Nuclear Advocacy Project)

- Conducted research and co-authored a policy memo using economic, technological, and historical analyses
- Networked with leaders in the field to coordinate a high-impact speaker event surrounding my team's work