Kevin Zhu

kbzhu@mit.edu | (925) 577-8274 | kevinzhu12.github.io | LinkedIn

EDUCATION

Massachusetts Institute of Technology **Cambridge, MA**

Pursuing B.S. in Computer Science & Engineering | GPA: 4.8/5.0 *Expected in May 2026*

- **Relevant Coursework:** Intro to Algorithms (6.121/6.006), Discrete Math (6.120/6.042), Linear Algebra (18.06), Fundamentals of Programming (6.101/6.009), **Fall Coursework:** Design and Analysis of Algorithms (6.122/6.046), Probability and Random Variables (18.600), Intro to Machine Learning (6.390/6.036)

EXPERIENCE

Lawrence Livermore National Lab **Livermore, CA**

Data Science Intern *May 2024 - Present*

- Implemented LASSO regression model for prediction of phenotypic and athletic performance measures
- Used training data from >50,000 molecular measurements (Cytokines, Metabolomes, DNA Methylation, etc.)
- Performed feature selection using cross-validation and hyperparameter tuning (alpha) to minimize MSE
- Utilized Quartz supercomputer, one of the world's fastest HPC supercomputers, for computing tasks

Swiftly **Cambridge, MA**

Tech Consultant *Jan 2024 - May 2024*

- Developed retail system using Python and sk-learn library to manage catalog of over 6 million products
- Implemented k-means clustering on vectorized product descriptions using bag-of-words model

MIT Media Lab **Cambridge, MA**

Undergraduate Researcher *Nov 2023 - Feb 2024*

- Dataset paper "Physiological Dataset for Cognitive States of Learning, Recognition, and Recall" in preparation
- Performed ANOVA analysis of learning, recall, recognition phases on an eye based bio-signals dataset
- Used Python, Pandas, SciPy to create data pipelines and processing for ML models

PROJECTS

Jabber AI – Personal project planning assistant and interactive notes whiteboard *Jun 2024*

- Integrated Hume EVI and speech prosody model for real-time conversation and emotional intelligence
- Used Masonry.js to implement reactive grid UI and synchronous notecard features
- Used OpenAI API and prompt engineering to process transcriptions and create digestible bullet notes

QuickDef – Chrome extension to explain unknown text using OpenAI API *May 2024*

- Developed Chrome extension using JavaScript that produces real-time explanations with popup interface
- Increased learning efficiency by reducing overhead from switching tabs to lookup info
- Utilized Chrome Extensions API to access webpage text and OpenAI API to generate explanations

Quote Search – Efficient search tool for precise quotes *Dec 2023 - Jan 2024*

- Developed web application using React (Next.js) and Tailwind CSS to create UI for search tool
- Used Fuse.js fuzzy search library to implement approximate keyword matching in search engine
- Wrote Python script to transform csv dataset of 500,000 quotes, authors, and categories to JSON format
- Added incremental search feature that updates search results with every keystroke

ACTIVITIES AND SKILLS

- **MIT Varsity Men's Volleyball:** NCAA DIII Student Athlete
- **Activities:** Sigma Chi Fraternity, MITech Consulting Club
- **Languages/Technologies:**
  - Python
  - SQL
  - Pandas
  - JavaScript
  - React
  - TypeScript
  - AWS
  - Keras
  - Git, Github
  - HTML
  - Linux
  - TensorFlow