Kevin Zhu

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EDUCATION

Massachusetts Institute of Technology **Cambridge, MA**

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

- **Relevant Coursework:**
  - Algorithms, Data Structures
  - Discrete Math
  - Python Programming Fundamentals
  - Linear Algebra
  - Multivariable Calculus
  - Microeconomics
  - Physics Electricity & Magnetism
  - Physics Mechanics

EXPERIENCE

Lawrence Livermore National Lab **Livermore, CA**

Data Science Intern *May 2024 - Present*

- Built ML models to predict human performance using biomarker data from West Point
- Utilized training data from 50,000 molecular measurements (heart rate, protein levels, VO2 max, etc.)

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*

- Contributed to *MemEye* study – using eye movement and emotibit data to predict memory phases
- Used Python, Pandas, SciPy to calculate saccades, fixation, blinks data from 32 participants
- Performed ANOVA analysis of learning, recall, recognition phases on the saccades dataset
- Used TensorFlow to build ML models for predicting memory phases from eye data

PROJECTS

JourneyGenie – Web application to generate unique road trip itineraries and map directions *Jun 2024*

- Used React (Next.js) and Tailwind CSS to design UI with text input, dropdowns, multi-select, etc.
- Applied Google Maps API to create map UI and interactive markers/directions using itinerary
- Implemented OpenAI API's streaming feature based on road trip user input
- Utilized prompt engineering techniques to optimize response quality from GPT models

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

ADDITIONAL INFORMATION

- **MIT Varsity Men's Volleyball:** NCAA DIII Student Athlete
- **Activities:** Sigma Chi Fraternity, MITech Consulting Club, MIT Entrepreneurship Club
- **Languages/Technologies:**
  - Python
  - SQL
  - Pandas
  - JavaScript
  - React
  - TensorFlow
  - Next.js
  - Node.js
  - Git
  - CSS
  - Numpy
  - Linux