Ken Lu Resume

Brooklyn, NY | kenlu519@gmail.com | linkedin.com/in/ken-h-lu | github.com/kenyounot123 | [ken-lu.dev](ken-lu.dev)

EDUCATION

Binghamton University, State University of New York   *Expected May 2024*
Bachelor of Arts in Mathematical Sciences
Cumulative GPA: 3.65 /4.00
Relevant Coursework: Text Mining, Spatial fundamentals in R, Linear Algebra, Topology

TECHNICAL SKILLS

Languages: Javascript, Ruby, React, HTML, CSS, Python, R
Tools & Technologies: Git, Vite, npm, Visual Studio Code, Linux, MacOS, AWS EC2, Firebase, Firestore
Libraries & APIs: MUI (Material UI), Tailwind CSS, Bootstrap, OpenAI API, Stripe API, NumPy, RSpec, Jest, Devise

PROFESSIONAL EXPERIENCE

FlashPrepAI, *Software Engineer & Co-Founder* | New York, NY   *Aug 2024 - Present*
- Created and launched an AI-powered flashcard application using Next.js, React, and TypeScript, integrating OpenAI for content generation and Clerk for user authentication, serving over 200 active users.
- Crafted a visually appealing and user-friendly front end using Figma for design prototypes, resulting in a 25% increase in user engagement.
- Added Stripe for subscription management and payment processing, achieving a 10% conversion rate for premium plans.

Headstarter AI, *Software Engineer Fellow* | New York, NY   *Aug 2024 - September 2024*
- Built and deployed 5 AI projects in 5 weeks using React JS, Next.js, Firebase, Clerk, and Vercel, following agile methodologies with weekly sprints and incorporated CI/CD practices for iterative deployment
- Worked in a team of 3 to develop an interactive customer support agent using Next.js, integrated a custom RAG pipeline using OpenAI and Pinecone that responds based on a company's knowledge base
- Collaborated with 3 Fellows to build and deploy a SaaS product that generates dynamic flashcards based on any topic using the GPT-4o via the OpenAI API, integrated a paywall and custom pricing plans using the Stripe API
- Implemented a web scraper that automatically extracts data from Rate my Professor and upsert to a Pinecone index, integrated with a RAG pipeline using LangChain and OpenAI GPT-4o to get up-to-date and relevant answers to user queries

Freelance Full Stack Developer, *Full Stack Developer* | New York, NY   *July 2024 – Aug 2024*
- Produced a full-stack eCommerce web app for a client's business using Ruby on Rails, leading to a 30% increase in online sales.
- Designed and managed the database schema to efficiently handle over 100 product listings and 1000 customer records.
- Integrated secure payment gateways to facilitate online transactions, processing over $1000 in sales per month.
- Collaborated with the client to understand business requirements and deliver a solution that meets their needs, resulting in a 20% growth in the client's customer base.

PROJECT EXPERIENCE

Messenger App, *Web Developer* | Independent Project   *June 2024 - July 2024*
- Prepared a web application enabling users to send and receive messages using React.js for the front-end and Ruby on Rails for the back-end.
- Designed and built RESTful APIs to manage user authentication and authorization using Devise-api gem, to ensure secure access and data integrity.
- Engineered real-time messaging capabilities with Action Cable and WebSockets, achieving a 95% reduction in message latency.
- Conducted extensive testing using RSpec and Factory Bot, achieving 95% test coverage and reducing bug incidence by 30%.

University Club Match Quiz, *Team Member* | Group Project   *January 2024 - February 2024*
- Conducted a club match quiz with improved personalization capabilities, leveraging web scraping and JSON conversion, improving quiz accuracy by 20% and user engagement by 30%.
- Engaged in a team of 4 to execute various aspects of the project, including web scraping, data conversion, personalization algorithm enhancement, and user interface optimization, ensuring a comprehensive and cohesive implementation.
- Analyzed and improved personalization algorithm, increasing quiz accuracy by 20%. and a 30% increase in user engagement.