Ken Lu

Brooklyn, NY | kenlu519@gmail.com | linkedin.com/in/ken | github.com/ken | ken-lu.dev

EDUCATION

Binghamton University, SUNY

Binghamton, NY

Bachelor of Arts in Mathematical Sciences

Aug. 2020 - May 2024

EXPERIENCE

Headstarter AI

Aug. 2024 – Sept. 2024

Software Engineer Fellow

- 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
- Implemented a web scraper that automatically extracts data and upsert to a Pinecone index, integrated with a RAG pipeline using LangChain and OpenAI GPT-40 to get up-to-date and relevant answers to user queries

Freelance Developer

July 2024 - Aug. 2024

Full stack developer

- Produced an eCommerce web app for a client's using Ruby on Rails, leading to a 30% increase in online sales
- Managed the database schema to efficiently handle over 100 product listings and 100 customer records
- Integrated secure payment gateways to facilitate online transactions, processing over \$500 in sales per month
- Collaborated with the client to deliver a tailored solution, boosting their customer base by 20%

Projects

Flash Prep AI | Co-Founder — Revenue Project

Aug. 2024 - Sept. 2024

- 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
- Used Stripe for payment processing, achieving a 10% conversion rate for premium plans

Haive | Team Project

July 2024 – Aug. 2024

- Developed Haive, an AI chatbot platform with specialized chatbots for various fields, each utilizing a tailored RAG pipeline with Pinecone and OpenAI API to enhance conversational capabilities
- Implemented a modern UI using Next.js, React, and MUI, featuring user authentication and chat history management, deployed on AWS EC2, leading to a 50% reduction in load times and a 99.9% uptime

ACTIVITIES & AWARDS

Hiring Hackathon for Rilla | Finalist — 36 Hour Hackathon

Aug. 2024 – Sept. 2024

- Developed a sales transcript annotation tool for a hackathon using TypeScript, React, and Next.js, implementing features for annotating, commenting on transcripts, and AI summarizing
- Integrated a RAG pipeline with OpenAI and GPT LLM for AI summarizing, enhancing the tool's summarization capabilities
- Implemented a serverless backend with Node.js and AWS Lambda, processing daily CRUD operations with 50% reduced server costs and 99% uptime, as tracked by AWS monitoring tools

University Club Match Quiz | 1st Place Winner — 24 Hour Hackathon

Jan. 2024 – Feb. 2024

- \bullet Developed a club match quiz for Binghamton University with enhanced personalization using Cheerio for web scraping, and HTML, CSS, and JavaScript for the frontend, improving quiz accuracy by 20% and user engagement by 30%
- Collaborated in a team of 4 to integrate web scraping, data conversion, and personalization algorithms, resulting in a cohesive and optimized user interface

TECHNICAL SKILLS

Programming Languages: JavaScript, Ruby, Python, TypeScript, HTML/CSS, R Frameworks/Libraries: React, Rails, Nextjs, Material-UI, NumPy, RSpec, Jest

Technologies: Git, VS Code, Firebase, Postman, MacOS, Linux