

# Ken Lu

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

## EDUCATION

**Binghamton University, State University of New York**

*Bachelor of Arts in Mathematical Sciences*

Binghamton, NY

Aug. 2020 – May 2024

## EXPERIENCE

**Full Stack Software Engineer**

Mar. 2025 – Present

*Co-Founder*

- Developed a full-stack, AI-integrated speech therapy web app using Ruby on Rails 8, Hotwire, and TailwindCSS to support research on gamified intervention for children with speech sound disorders
- Integrated OpenAI Whisper to analyze children's real-time speech and provide automated scoring and feedback
- Implemented role-based authentication with parallel login systems for users and admins, and designed a pseudonym-based session tracker to monitor user progress and therapy outcomes

**Full Stack Software Engineer**

Oct. 2024 – Present

*Welbyte LLC*

- Maintained a large traditional Ruby on Rails codebase, resulting in increased code reliability and scalability
- Managed email and SMS campaigns using Postmark and Twilio APIs, including setting up webhook URLs to handle delivery events and user replies, resulting in increased outreach efficiency and improved engagement tracking
- Collaborated in an Agile environment with daily stand-ups and sprint planning, resulting in timely feature delivery

**Software Engineer Fellow**

Aug. 2024 – Sept. 2024

*Headstarter AI*

- 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

## PROJECTS

**TrackExp** | *Personal Project* – [track-exp.com](https://track-exp.com)

Jan. 2025 – Present

- Deployed an expense tracking application using Ruby on Rails, Hotwire, and Docker on Digital Ocean VPS
- Implemented financial analytics with interactive charts and automated recurring transactions via background jobs

**ChatPDF** | *Personal Project*

Sept. 2024 – Oct. 2024

- Programmed a RAG-based web app enabling users to upload PDFs and interact with their PDF via an AI chatbot
- Integrated LangChain with Convex to create custom RAG pipelines using OpenAI models, filtering embeddings for independence from other data sources, improving response accuracy by 30% and query relevance to over 85%

**Flash Prep AI** | *Co-Founder* — *Revenue Project* — [flashprepai.com](https://flashprepai.com)

Aug. 2024 – Sept. 2024

- Created and launched an AI-powered flashcard SaaS using Next.js, React, TypeScript, OpenAI, Clerk, and Firebase serving 200+ active users facilitating effective learning and retention of any topic of choice
- Engineered a seamless UX by designing an intuitive UI that allows users to create, manage, and review flashcard topics, resulting in 25% increase in user retention and a 30% boost in daily active users within the first month

## HACKATHONS & ACHIEVEMENTS

**Hiring Hackathon for Rilla** | *Finalist* — 200+ Teams — 36 Hour Hackathon

Aug. 2024 – Sept. 2024

- Built an AI transcript annotation tool using Next.js helping sales teams quickly gain insights from live call data

**University Club Match Quiz** | *1st Place Winner* — 100 Teams — 24 Hour Hackathon

Jan. 2024 – Feb. 2024

- Developed a club match quiz for Binghamton University using Cheerio, HTML, CSS, and JavaScript, improving quiz accuracy and user engagement by 30% and helping students find a club that fits them from over 1000+ clubs

## TECHNICAL SKILLS

**Programming Languages:** JavaScript, Ruby, Python, TypeScript, R

**Frameworks/Libraries:** React, Rails, Nextjs, Convex, Docker Material-UI, RSpec

**Technologies:** AWS, Langchain, Firebase, Postman, Git, Linux