## Rahul Bikram Shah

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### **Education:**

Bachelor of Science Major in Computer Science and Minor in Mathematics; Beloit College' 2026

### **Relevant Coursework:**

Object Oriented Programming, Data Structures & Algorithms, Database Capstone, Software Engineering Capstone, Calculus II, Discrete Structures, Threads & Operating System

### **Experience:**

#### Software Engineering Fellow| HeadstarterAl | New York, NY

07/2024 - 08/2024

- Built and deployed 5 Al projects in 5 weeks using React JS, Next.js, Firebase, OpenAl, Pinecone, Stripe API, 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 OpenAl 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 Llama 3.1 LLM via the Groq API, integrated a paywall and custom pricing plans using the Stripe API

#### Computer Science Lab Assistant | ACME Engineering College | Kathmandu, Nepal

05/2023 - 07/2023

- Assisted students in the computer lab with coding.
- Helped the professor for managing the lab.
- Presented the basics of C programming in the lab

#### Technical Service Assistant | Beloit College | Beloit, WI

01/2023 - 04/2023

- Managed library's database to assure proper classification of materials.
- Conceptualized strategy to boost loading time of application.
- Implemented relevant python and java libraries to revamp functionality and user experience of application

#### **Projects:**

Al Flashcard SaaS

- Built a flashcard application using Next.js, Clerk, Firebase, OpenAI, and Stripe
- Added analytics to the web app and got 100 users signed up
- · Added a feature to save user's desired flashcard

#### Al Customer Support

- · Created a chatbot using Next.js
- Integrated RAG pipeline leveraging OpenAI and Pinecone to deliver responds based on a given knowledge base
- Deployed the web-app to AWS EC2 Servers

#### Al Rate My Professor

- Build the Rate My Professor Al Assistant with Next.js, OpenAl, and Pinecone.
- Implemented a feature that allows users to submit links to various professors' pages on Rate My Professor.
- Leveraged Google Analytics to monitor and analyze website traffic, gaining insights into user behavior and engagement to inform data-driven decisions and optimize site performance.

### **Certifications:**

Crash Course on Python (Google), Google AI Essential, Overview of Data Visualization

# Skills:

Python, C, Java, SQL, TDL, HTML, CSS, Firebase, Tailwind, DNS, NextJs, ReactJs, OpenAl, AWS, StripeAl, RAG, Vectors, Cloud Computing, Microsoft Azure, AWS