YAHYA HAMU

✉ yhamu27@gmail.com in www.linkedin.com/in/yahya-hamu 🌐 www.yahyahamu.github.io/

EDUCATION

University of Colorado Denver   **Expected Graduation; May 2026**

Bachelor of Arts in Computer Science
- **Relevant Courses**: Object-Oriented Programming, Logic Design, Programming in Python, Fundamentals to Engineering

SKILLS

Languages: Python, Java, C++, HTML/CSS, JavaScript

Tools/Frameworks: React, Node.js, Firebase, Git, AWS

Other: 3-D Printing, Laser Cutting, IDEs (PyCharm, Eclipse, Visual Studio Code)

EXPERIENCE

Code Instructor, CodeAdvantage   **June 2024 - Present**

Denver, CO
- Developed and executed engaging after-school coding and robotics lesson plans for 60+ students, fostering creativity and problem-solving skills.
- Assisted in back-end projects, contributing to successfully implementing new features and reduced security breaches by 25%
- Collaborated and maintained proactive communication with CodeAdvantage's management team, ensuring program alignment and success.

Software Engineering Fellow, Headstarter AI   **July 2024 - Sept 2024**

Long Island, New York (Remote)
- 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.
- Participated in weekly sessions with engineers from Google, Y Combinator, Stanford, Amazon, and venture-backed startups to enhance technical and leadership skills.

PROJECTS

Adversarial Attack Experiment | Python, Foolbox, PyTorch   **October 2024**
- Executed adversarial attacks on the CIFAR-10 dataset using L2 Projected Gradient Descent, identifying model vulnerabilities.
- Conducted a grid search for optimal parameters across LinfPGD and Carlini-Wagner attacks, analyzing impact through robustness scoring to refine model accuracy and resilience.
- Visualized and analyzed misclassified adversarial examples to gain insights into model weaknesses.
- Achieved 2nd place in a decoy challenge competition, showcasing expertise in adversarial machine learning.

Flashcard App | React, Node.JS, Groq API   **August 2024**
- Developed and deployed a SaaS product that dynamically generates flashcards on any topic using the Llama 3.1 LM, improving users' study efficiency.
- Integrated a paywall and custom pricing plans using the Stripe API, enabling subscription-based access and monetization of premium features.
- Implemented scalable deployment using Vercel, ensuring seamless integration with Next.js for a fast, reliable user experience.

Goat Sneakers AI Chat Bot | Node.JS, Vercel, OpenAI   **July 2024**
- Developed an AI power chat app using Node.JS and Next.JS, and integrated a custom RAG pipeline using OpenAI to provide users with personalized fashion recommendations based on their preferences.
- Designed and implemented a dynamic frontend with Next.js, improving the user experience by offering real-time suggestions for destinations, accommodations, and activities.

LEADERSHIP

Co-Founder, EmpowerYouthEverywhere (EYE)   **November 2023 - Present**

Denver, CO
- Lead more than 200+ of Denver's youth, elevating them in academics, sportsmanship, and faith by organizing leadership events, fundraisers, and networking opportunities for underrepresented youth.

President, National Society of Black Engineers (NSBE)   **May 2023 – May 2024**

University of Colorado Denver
- Leader of a student organization of 90+ members, hosting bi-weekly events, managing a board of 13 executives, and strengthening the underdeveloped communities within the Auraria campus.
- Raised over $15,000 to attend regional and national conferences.
- Selected as a winning chapter of the prestigious 2023 Apple Black@Hardware scholarship. Awarded $5000 and developed a close partnership with Apple's Black@Hardware group.