Ankit Poudyal

571-620-8486 | ankitpoudyal@virginia.edu | linkedin.com/in/ankitpoudyal | ankitpoudyal.com

EDUCATION

University of Virginia — Charlottesville, VA
B.S. in Computer Science, 3.73 GPA — *Expected May 2026*
Relevant Coursework: Data Structures and Advanced Algorithms, Machine Learning, Linear Algebra, Computer Systems and Organization, Discrete Mathematics and Theory

EXPERIENCE

Software Engineer Intern — June 2024 – August 2024
Alarm.com — *McLean, VA*
- Enhanced internal chatbot using TypeScript and React, integrating Azure OpenAI Assistants for file uploads and algorithmically switching APIs based on query complexity, improving response times for 2,000+ employees
- Integrated Retrieval-Augmented Generation (RAG) with company Confluence documentation using cosine similarity to identify and link relevant documents, reducing information search time by approximately 35%
- Developed and integrated metrics to track response time, error occurrences, and sentiment surveys to track user engagement, including visualizations supported by Wavefront to provide valuable insights

Software Engineer Intern — January 2024 – May 2024
Vytal — *Remote*
- Built a Flask backend with MongoDB that seamlessly integrated with a React Native app to securely manage biometric data, utilizing AES-256 encryption and role-based access control
- Leveraged OpenAI API, AWS, and Apple Health data to provide personalized health recommendations and implemented biometric tests for various eye movements, enabling comprehensive health insights
- Implemented an eye-tracking API dashboard with Stripe integration for billing, utilizing SQL to store and retrieve real-time usage data and financial transactions, ensuring users have seamless access to analytics and insights

Undergraduate Computer Science Teaching Assistant — January 2024 – Present
University of Virginia — *Charlottesville, VA*
- Serving as project manager for 10+ students in their software engineering class, guiding them through an Agile semester-long project with weekly standups, mentoring, and hands-on feedback on deliverables
- Facilitated weekly standups and provided technical support to over 300 students on integrating key technologies like Amazon S3, Google Maps API, Google OAuth, and Heroku deployment

PROJECTS

Automated Shopping Application | *JavaScript, React, Express, Electron, MongoDB, AWS*
- Launched an automated shoppping application using Electron for frontend design and Node.JS for backend integration, which supported over 250 online stores and processed $50,000 in transactions over 7 months for 300+ active users
- Created a real-time checkout analytics system using MongoDB, tracking user transactions to identify peak times, purchasing trends, and bottlenecks, enabling optimization of heavily utilized modules

Real-Time Crypto Market Analysis Tool | *C++, Python, NumPy, Matplotlib*
- Developed a C++ engine to process live cryptocurrency data from multiple exchanges, providing traders with instant insights into market trends, volatility surges, and inter-crypto correlations
- Built interactive Python dashboards with Matplotlib to visualize price fluctuations, trading volume spikes, and high-impact events like flash crashes, enabling timely, data-driven trading decisions

Real-Time Translation Chat | *TypeScript, Angular, Firebase, LibreTranslate, Google Cloud Platform*
- Designed a multilingual chat platform using Angular, allowing users to establish chat rooms and invite others through links, with built-in automatic translation enhancing cross-language user interaction
- Utilized Firebase to facilitate instant, real-time communication between users, enabling seamless message exchanges that are immediate and responsive, with translations completed in under 2 seconds

SKILLS

Tools and Technologies: Git, GitHub, AWS, Docker, Node.js, React, Angular, Django, Flask, Linux (Ubuntu, Debian)
Programming Languages: Python, C, C++, C#, JavaScript, SwiftUI, Java, SQL (MySQL, SQLite), Bash, TypeScript
Certifications: Microsoft Office Specialist Master (MOS)