

# NATAN M. KASSA

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## EDUCATION

**University of Southern California, Viterbi School of Engineering**  
*Bachelor of Science in Computer Science and Computer Engineering*

- Honors:** Graduated with cum laude honors, Dean’s list honors (6 semesters)
- Relevant Coursework:** Data Structures and Object-Oriented Design, Distributed Systems, Theory of Computing, Machine Learning, Computer Architecture, Robotics, Introduction to Artificial Intelligence, Cybersecurity, and Probability Theory

**Los Angeles, CA**  
Graduated June 2024

## EXPERIENCE

**Headstarter**  
*Engineering Fellow/Intern*

- Completed a 2-month software engineering fellowship with a focus on AI development, resulting in 5 innovative AI projects and active participation in 5 hackathons
- Streamlined processes and cleared backlog tasks, reducing project timelines by 4 weeks for a startup

**Seattle, WA**  
June 2024-August 2024

**AskAwayOlympics (AI Chatbot Project)**  
*Software Engineer*

- Led integration of OpenAI's GPT 4.0 model via server-side API, delivering dynamic, context-aware responses thereby improving accuracy and relevance of chatbot replies
- Optimized application performance by utilizing Next.js for server-side rendering and efficient routing, achieving a 25% reduction in load times
- Engineered a multilingual chat interface with React.js, enabling real-time communication in 3 languages, increasing user engagement on a global scale

**Bellevue, WA**  
July 2024-August 2024

**DailyBrief (AI News Aggregation Project)**  
*Software Engineer*

- Created and deployed a news aggregation and summarization application with Flask and FastAPI, enhancing content filtering and reducing information retrieval time by 70%
- Leveraged Supabase for database management and OpenAI’s GPT model, achieving 90% accuracy in content summarization
- Implemented web scraping/processing pipelines, optimizing retrieval of articles with Python libraries (Requests, LangChain)

**Bellevue, WA**  
June 2024-July 2024

**Signal Cycle Solutions**  
*Software Engineer*

- Developed and extensively tested a bicycle safety system, featuring automated LED turn signals, a sonar-based lane-changing mechanism, and a real-time speedometer using an ATMEGA328P microcontroller
- Designed and implemented hardware and software components to enhance user experience and interaction, meeting needs of thousands of college students and other cyclists in high-traffic areas

**Los Angeles, CA**  
January 2024-May 2024

**Meta Above & Beyond CS Program**  
*Software Engineer*

- Engaged in hands-on workshops and collaborative projects with Meta software engineers; mastering backend development skills such as C++, Python, and concepts of data structures
- Contributed to code reviews, debugging sessions, and best practices discussions to strengthen technical skills and foster growth

**Los Angeles, CA**  
August 2022-November 2022

## LEADERSHIP AND INVOLVEMENT

**East African Student Association**  
*Member*

- Led cultural shows that fostered social, educational, and cultural connections among East African diaspora and those interested in African culture, promoting engagement in enriching forums

**Los Angeles, CA**  
August 2021-June 2024

## SKILLS

- Boards & Hardware:** Arduino Uno, Raspberry Pi, Nexys 4, FPGA Boards
- Tools & Technologies:** Git, SSH, Pip, Npm, Vercel, OpenAI SDK, Fetch API
- Programming Languages:** C++, Python, JavaScript (ES6), C, HTML, CSS, TypeScript, Dart, Verilog
- Frameworks & Libraries:** React.js, Node.js, Next.js, Firebase, Tailwind CSS, Material-UI, Matplotlib, Flask, FastAPI