

EDUCATION

Harvard University <i>A.B. in Computer Science and Economics</i>	Cambridge, MA <i>Aug 2023 – May 2027</i>
• Coursework: Discrete Mathematics, Intro to Algorithms, Linear Algebra, Data Structures & Algorithms, Computation for Contemporary Sciences, Visualization, Introduction to Probability, GenAI • Clubs: Harvard WECODE, Harvard Women in CS, HUMIC, Harvard Society of Black Scientists and Engineers, Harvard African Students Association	

TECHNICAL SKILLS

Languages: Python, JavaScript, Java, C/C++, SQL, HTML/CSS, JSON
Frameworks & Libraries: FastAPI, React.js, Next.js, LangChain, Tailwind CSS, Node.js, Bootstrap, Frappe, Flask, TensorFlow, PyTorch
Databases & Tools: MySQL, PostgreSQL, Pinecone (vector database), Git, Docker, REST APIs
PROGRAMS & CERTIFICATES

Amazon Web Services (AWS) Skill Builder — 1) Introduction to Generative AI, 2) AWS Technical Essentials	Oct 2025
Salesforce Trailhead Academy — Get Started with Agentforce for Service (AFS002)	Oct 2025
CodePath — Intermediate Technical Interview Prep	Sep 2025
The Global Career Accelerator — Coding for Web Track	May 2025
RELEVANT WORK EXPERIENCE	

Harvard College GenAI Research Program <i>Software Engineering Intern</i>	Cambridge, MA <i>June 2025 – Aug 2025</i>
• Built a bilingual RAG tutor enabling Swahili-speaking students to access curriculum-aligned content. • Processed 1K+ textbook chunks with LangChain, Pinecone, and GPT-4 Turbo, achieving 95% retrieval accuracy. • Designed RESTful APIs and optimized PostgreSQL schemas in FastAPI to support chapter- and question-level queries. • Developed three tutor modes (summarization, revision Q&A, free-form) with a Next.js/Tailwind frontend and FastAPI backend, achieving <2s response times. • Piloted with 56 students; dual-language (English + Swahili) output improved comprehension and aligned with syllabus.	
Kerugoya County Referral Hospital <i>Software Engineering Intern / Priscilla Chan Fellow</i>	Kerugoya, Kenya <i>June 2024 – Aug 2024</i>
• Built hospital management portal automating records, billing, and scheduling for 1,000+ patients, cutting wait times by 30%. • Developed ERP/EMR modules in Java/Python with Frappe, deployed via Docker, and integrated MySQL + REST APIs. • Worked across Agile sprints on feature design, reviews, debugging, and testing; reduced post-deployment defects by 25%.	

TECHNICAL PROJECTS (VIEW FULL GALLERY)

Adaptive Swahili-English AI Curriculum Tutor	<i>June 2025 – Aug 2025</i>
• Designed RAG pipeline with PDF parsing, embeddings, and metadata filters using LangChain, Pinecone, and GPT-4 Turbo. • Developed FastAPI backend with REST endpoints and PostgreSQL schemas supporting scalable chapter-level queries. • Built Next.js/Tailwind frontend enabling summarization, revision Q&A, and free-form modes with <2s latency.	
WECODE Conference Platform	<i>Sep 2025 – Present</i>
• Develop backend workflows for authentication, registration, and mentorship matching using React and Supabase. • Build reusable components supporting onboarding for 1,200+ users. • Oversee testing, deployment, and CI/CD ensuring reliability and scalability.	
Nyeri Hospice Messaging Infrastructure	<i>July 2019 – Aug 2019</i>
• Built a DeskAlert messaging system in Python, Node.js, and MySQL to coordinate staff-patient communication. • Implemented message queuing and logging to improve reliability and reduce response times by 40%.	

LEADERSHIP & ACTIVITIES

Harvard Undergraduate Machine Intelligence Community (HUMIC) <i>Project Lead & Web Scraping Engineer</i>	Cambridge, MA <i>Sept 2024 – Present</i>
• Promoted from Fellow to Project Lead; developed Harvard’s first self-learning assistant using CrewAI multi-agent frameworks. • Built web scraping pipelines with Python (BeautifulSoup, Requests) and BraveSearch API to collect educational content. • Coordinate profiling, ranking, and roadmap teams integrating user data for personalized learning.	
Harvard WECODE <i>Associate Director of Engineering</i>	Cambridge, MA <i>Sept 2025 – Present</i>
• Co-develop WECODE’s inaugural engineering portal for the world’s largest student-run women-in-tech conference (1,200+ attendees). • Implement authentication, registration, and event logistics using React and Supabase. • Oversee technical planning, code reviews, and deployment cycles ensuring scalability and maintainability.	