CAREEN NEHEMIA MWENISONGOLE

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EDUCATION

Massachusetts Institute of Technology, *B.Sc. Artificial Intelligence & Decision Making*   Cambridge, MA | **May 2027**
Relevant Coursework: Intro to Machine Learning, Data Structures and Algorithms, Fundamentals of Programming, Discrete Mathematics, Probability, Linear Algebra & Calculus

WORK EXPERIENCE

Birth By Us - *Software Engineering Intern* | [BirthByUs](#)   Chicago, IL | June - August 2025
- Built a full-stack **React Native** postpartum support app from **0 to 1**, delivering core features for beta launch and enabling 2,000+ families to coordinate care through shared task management
- Developed **REST APIs** and backend controllers for role based user access, and time-based data filtering in **MongoDB,** using indexing and pagination to improve responsiveness
- Performed **NLP analysis** on 20+ interview transcripts and visualized insights in Tableau to inform **Figma UI/UX** design

MIT Concrete Sustainability Lab - *Full Stack Developer* | [Concrete-GHG](#)   February - May 2025
- Designed and developed a web app using **Plotly.js** and **Pandas** to model and visualize greenhouse gas (GHG) emission savings across all 50 U.S. states enabling civil engineers to compare low-emission concrete design options
- Built a **Flask** backend with **PostgreSQL** to handle real-time data queries on 10,000+ concrete mix records
- Enabled 4 engineering teams to optimize low-emission concrete designs by delivering GHG insights through data analysis

Code Safari - *Technical Lead and Instructor* | [CodeSafari-Github](#)   June 2024 - present
- Designed a project-based curriculum for 45 Tanzanian students, covering **Python** and web development (**HTML/CSS/JS**), with $7500 funding secured for operations and instruction
- Architecting a self-guided coding platform with **FastAPI** and **GPT-4**, using **RAG** to deliver learning support
- Mentored 6 teams over 8 weeks to build and deploy web apps, providing feedback and debugging support in office hours

PROJECTS

Rafiki Academy - *Technical Lead* | [Rafiki-Github](#)
- Developing an AI-driven SAT practice platform with **React**, **Node.js**, and **MongoDB** to introduce an interactive feedback loop missing from most existing SAT prep materials
- Integrating **GPT-4** to infer student reasoning, and adapt follow-up questions to deliver personalized guidance beyond static answer keys
- Currently in beta with ~50 users, collecting data to refine accuracy, usability, and learning impact prior to public launch

BeaverBay Social Platform - *Product Engineer*
- Designed the **UI/UX** in Figma and built a **React**-based campus marketplace and social platform for MIT students
- Implemented real-time messaging with **WebSockets** (Socket.io) and secured user access with **Firebase** Authentication
- Deployed to 150+ users, collected feedback, and iterated on key features to improve usability and engagement

LEADERSHIP AND ACTIVITIES

Rafiki Global Scholars - *Co-Founder* | [rafikiglobalsch.org](#)   August 2024 - Present
- Co-founded a nonprofit supporting high-achieving Tanzanian students to gain admission to universities in the US
- Mentored 20+ students in SAT prep and essay writing, leading to acceptances at NYU, Tufts, Alfred, and Minerva
- Raised over $5,000 in funding, secured laptop donations through partnerships and built outreach through collaboration with local schools

Talented Scholars Resources - *Teaching Assistant for CS and Calculus*   March 2024 - Present
- Deliver 1:1 and small-group tutoring on debugging, algorithm optimization, and problem-solving strategies, boosting students' confidence and coding efficiency
- Lead weekly problem set nights for 30+ students, collaborative problem-solving and breaking down complex programming and math concepts into clear, approachable steps

TECHNICAL SKILLS AND INTERESTS

Languages & Tools: Python, JavaScript, TypeScript, HTML, CSS, Git, Figma, REST APIs
Frameworks & Platforms: ReactJS, React Native, Node.js, MongoDB, Firebase, PostgreSQL
Interests: Machine Learning, Web Development, Education (teaching), Healthcare, Photography, Poetry, Science-Fiction