

Zebenai Melaku

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Education

University of Virginia, School of Engineering and Applied Sciences, Charlottesville, VA Aug 2023 – May 2027
Bachelor of Science in Computer Engineering

- **Relevant Coursework:** HCI in Software Development, Creative Interaction Design, Software Dev Essentials, Intro to Machine Learning, Data Structures and Algorithms

Skills

Design & Research: Human-centered design, user research, iterative design cycles, usability evaluation, wireframe, story boarding, rapid prototyping.

Design Tools: Figma, ProtoPie, Sketch, Qualtrics

Development: Python, JavaScript, C, C#, HTML, CSS, React Native, Flask, Firebase, Node.js

Experience

UI/UX Product Design Intern, Hardshell – Remote Dec 2025 – Present

- Designed and prototyped user interfaces for enterprise AI data security platform, creating wireframes and interactive mockups for data visualization dashboards and workflow tools using Figma.
- Conducted user research and usability testing sessions to refine design of risk scoring dashboards and reports, translating complex technical requirements into intuitive interfaces for technical and non-technical users.
- Collaborated cross-functionally with engineering and product teams to develop design system and style guide, ensuring visual consistency across platform and marketing assets.
- Applied human-centered design principles to AI security and analytics visualization challenges, researching best practices to inform product design decisions for cybersecurity applications.

Research Assistant, Ultimate User Interface Lab – Charlottesville, VA Jun 2024 – Present

- Leading PadGlider project using human-centered design, conducting user research to inform ML algorithm implementation for adaptive interfaces
- Designed and rapid prototyped 70+ custom models using iterative design methodology, testing and refining based on user feedback
- Developed user-centered GUI using C#, conducting user testing sessions and incorporating feedback into design iterations

Teaching Assistant, Human-Computer Interaction Course – Charlottesville, VA Aug 2025 – Present

- Led project coordination for 80+ student HCI course, supervising design teams throughout semester-long projects
- Mentored students on design principles, user research methodologies, and best practices in human-centered design

Projects

Olympet: AI-Powered Educational Travel Buddy May – June 2025

- Conducted user research including interviews with parents and children to understand educational travel needs
- Developed high-fidelity interactive prototypes using Figma and ProtoPie, creating seamless user flows connecting physical toy with mobile app
- Designed dual-interface system applying child-centered design principles while ensuring parental control functionality

NSBE UVA Chapter Website Development July 2025 – Present

- Designed responsive UI/UX using React, TypeScript, and Tailwind CSS for 100+ active members
- Applied typography, layout, and visual design principles to create engaging, accessible digital experience

Leadership

Programs Chair, National Society of Black Engineers (NSBE) – Charlottesville, VA Oct 2023 – Present

- Orchestrated programs and events for 100+ members, demonstrating organizational and leadership skills

Co-Outreach Chair, ColorStack – Charlottesville, VA Jan 2025 – Present

- Developed outreach initiatives for 30+ member chapter, promoting pathways to tech success for underrepresented students