Nissi Otoo

571.343.6735 | nssim516@gmail.com | http://www.linkedin.com/in/nissi-otoo | https://nissiotoo.netlify.app/

Education

Virginia Tech | Blacksburg, VA

EST. MAY 2027

B.S. Computer Engineering | GPA: 3.3

Relevant Courses: Digital Systems, Circuits & Devices, Computational Engineering, Linear Algebra, Differential Equations, Physics

Skills

Languages: Python, MATLAB, LaTeX, C++, HTML, CSS, JavaScript, C#

Tools: AD3 Oscilloscope, Arduino

Programs: Microsoft Office, Visual Studio Code, Unity, SolidWorks

Experience

Research Intern | Private-Eye Lab

MAY. 2024 - PRESENT

Blacksburg, VA

- Utilized Unity and C# to design and implement advanced privacy mechanisms for eye-tracking in augmented reality.
- Designed and refined 3 user-centered privacy features through iterative prototyping, applying UX practices, influencing user trust in data sharing by 16% with eye-gaze logging integration.
- Conducted 25+ user studies to evaluate privacy mechanisms, including developing testing protocols, managing sessions, and performing statistical analysis to validate the effectiveness of designs.

Research Assistant | REACH CS Lab

FEB. 2024 - PRESENT

Blacksburg, VA

- Conducted 6 interviews and applied thematic analysis to code over 250 lines, identifying actionable themes.
- Led market research and co-authored a paper accepted to CSCW '24, an international conference with ~25% acceptance rate.
- Collaborated with a team of 4 to write, format, and edit over 15 pages of technical content using LaTeX and Overleaf.

Research Assistant | SMILE Engineering Education Lab

SEP. 2023 - MAR. 2024

Blacksburg, VA

- Conducted data cleaning and transcript formatting for 15+ interviews.
- Authored 15+ analytical memos to summarize findings using thematic analysis.
- Presented research poster at CoNECD Conference to 250 attendees.

Projects

Personal Website | Full-Stack Development

APR. 2024

- Developed a website from scratch utilizing 48% HTML, 43% CSS, and 9% JavaScript.
- Implemented interactive elements including transitions, buttons, and a JavaScript image slider.
- Ensured cross-device compatibility with a responsive interface for user-friendly UI/UX.

Distracted Driving Correlation Analysis | Data Analysis Program

OCT. 2023

- Conducted an analysis on data from The National Highway Traffic Safety Administration.
- Applied statistical modeling and visualization on MATLAB to identify and interpret correlation.

Hair Bias in Generation Z | Self-Identity Research

AUG. 2022 - MAR. 2023

- Authored a 5000-word independent study investigating the influence of hair bias on black women's self-esteem and career opportunities within Generation Z.
- Leveraged quantitative and qualitative methods to survey 100+ students, uncovering trends and agreement levels.
- Presented findings to a 6-member professional board.

Leadership

Corporate Liaison | National Society of Black Engineers (NSBE)

MAY. 2024 - PRESENT

- Secured \$30k+ in funding through sponsorship acquisition for initiatives, trips, merchandise, and events.
- Managed financial operations through detailed Excel sheet and overseeing expenditures for 30+ corporate sponsors.

Peer Mentor | Center for the Enhancement of Engineering Diversity (CEED)

AUG. 2024 - PRESENT

- Addressed and provided solutions to first-year engineering challenges faced by students.
- Guided 8 students personally in developing strategies and skills for navigating key engineering events and milestones.