Demilade Tinubu
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EDUCATION

The University of Chicago — Chicago, IL
Bachelor of Science in Computer Science and Bachelor of Arts in Visual Arts — Expected: June 2025

Relevant Course Work: Scientific Visualization, Theory of Algorithms, Mathematical Foundations of Machine Learning

SKILLS /Languages: *Expert:* Python, C, Photoshop, Premiere Pro, Git, Linux, Data Structures *Proficient:* Blender, C++, Maya, SQL, Pandas, NumPy, Pytorch, DVC (Data Version Control)

EXPERIENCE

Sibel Health — Chicago, IL
Data Engineer Intern — June 2024– September 2024
- Optimized Digital Signal Processing (DSP) algorithms in Python and C for detecting sleep, heart rate, and pulse oximetry, improving accuracy by 40% and integrating them into sensor firmware and data pipelines.
- Created and implemented a data pipeline using Data Version Control (DVC), reducing data collection time by 2+ hours per experiment, accelerating sensor development by 3 weeks, and ensuring traceability and reproducibility for regulatory compliance.
- Developed a real-time validation framework for sensor firmware, enabling host-device communication and bypassing internal sensors, resulting in a $500,000 cost saving.

SCU:BA – Summer Coding at UChicago Builders Academy — Chicago, IL
Teaching Instructor — June 2024– August 2024
- Led daily workshops and developed a personalized curriculum for 20+ students, significantly enhancing their tech literacy and programming skills.
- Achieved a 90% improvement in programming proficiency, with students progressing from no experience to advanced levels of capability.

Kappa Theta Pi – Professional Technology Fraternity — Chicago, IL
Director of Outreach — January 2024 – Present
- Furnishing $10,000 dollars through various methods including partnerships from companies
- Secured and advised quarterly opportunities (4+ every 4 weeks) to help members connect and serve our community in various roles.

Intern & Lab Researcher - University of Maryland College Park — College Park, MD
Researcher — July 2020 – August 2021
- Created 28 image learning neural network using Python and Pytorch to perform data analysis
- Author on the Accepted Paper "Rethinking Common Assumptions to Mitigate Racial Bias in Face Recognition Datasets" to the First International Workshop on Human-Centric Trustworthy Computer Vision (HTCV) (Won 2nd Best workshop paper (HTCV)).

PROJECTS

A Direct Volume Renderer — January 2024
- Implemented a C-based multi-threaded tool with a camera model, 3D convolution, shading, and ray tracing for high quality renderings of volumetric 3D image datasets.

Foodies — January 2023
- Prototyped a dietary restriction-focused app, facilitating local food options, spearheaded user testing for valuable insights and product enhancements.

Shell — December 2022
- Developed a versatile command-line interpreter in C, capable of parsing commands, handling multiple inputs, and enabling output into files.

Logan Media Center, Team Member — September 2022 – Present
- Consulted with 20+ clients a day to get the best fit in of film equipment for the projects the client is working on.
- Problem solved various errors with 10+ types of camera and various equipment (Lights,Sound,Etc)

Paul Douglas Institute, Researcher/Filmmaker/Producer — September 2022 – June 2023
- Directed/Produced, Edited, and Filmed an Ethnographic Documentary on Hyde Park small businesses, edited over 30 hours of footage into a 1-hour documentary, With 7 Business interviews
- Covered by Chicago Tribune and Block Club Chicago; orchestrated a successful screening with 100+ attendees, Documentary currently has 1k Views