

MOYINOLUWA ADELOWO

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EDUCATION

Alabama A&M University, Expected May 2027

Normal, AL

Bachelor of Science, **Mechanical Engineering**; Minor in **Computer Science**; 4.0/4.0 GPA

Relevant Coursework: Computer-Aided Design, Engineering Programming, Engineering Analysis, Material Science, Statics

TechWise by TalentSprint, sponsored by Google, Expected September 2025

Software Engineering. Selected for a highly competitive Google-sponsored 18-month software engineering program.

AltSchool Africa

Lagos, Nigeria

Software Engineering. Diploma in **Backend Engineering**; 3.7/4.0 GPA

April 2022 – June 2023

Relevant Coursework: Intro to Web Development, Backend Engineering, Restful API Development. Technical Writing

TECHNICAL SKILLS AND SOFTWARE PROFICIENCIES

SolidWorks • Solid Edge • MATLAB • Simulink (in progress) • 3D-Printing • Python • JavaScript • TypeScript • C++ (in progress) • Git & GitHub

• React.js • Next.js • Node.js • MongoDB • PostgreSQL • Microsoft Office • Arduino Programming

WORK EXPERIENCE

Summer 2024

UCI Robot Ecology Lab

Irvine, CA

Undergraduate Researcher

- Designed 3D-printed adjustable and fixed ramps using SolidWorks to facilitate collaborative transportation between robots
- Developed MATLAB algorithms for collaborative mobility deployed on robotic hardware in the Robotarium.
- Assembled the TurtleBot3 Waffle Pi and partially integrated it with the Vicon motion capture system, utilizing ROS2, python, and C++ to build packages, nodes, and publishers for seamless integration.
- Presented research on collaborative robotic mobility at two symposiums showcasing the project's innovations, findings, and next steps.

Spring 2024

NSF-INSPIRE Research

Normal, AL

Undergraduate Researcher

- Worked with a team of five to refine methodologies and co-authored a comprehensive report, presenting our findings.
- Analyzed NOAA data on oceanic garbage patches using dynamic mode decomposition, identifying patterns in marine debris accumulation.
- Developed MATLAB algorithms for processing and visualizing oceanographic data, enhancing the interpretation of tidal mechanisms.

PROJECT EXPERIENCE

September 2023 – Present

NASA Human Rover Exploration Challenge and Formula SAE

Normal, AL

- Collaborated with other team members to design a task tool using SolidWorks to perform various tasks during the Rover Challenge.
- Implemented turning, facing, chamfering, drilling, and threading on a Lathe machine to build screws and other designed parts.
- Contributed to writing detailed reports on subsystems of the Rover and FSAE.

July 2024 – August 2024

Cat-A-Log

[Live link](#)

- Led a team of five as a project manager, utilizing Jira to assign tasks, track progress, and ensure timely completion of the minimum viable product for an AI-powered web app that classifies cat images based on breed and pattern rarity and creates trading cards.
- Developed and integrated the authentication system using Django, connecting it seamlessly with the React front end to ensure secure user access and data management.
- Containerized the full-stack application with Docker and managed the deployment process to AWS, optimizing the application's scalability.

March 2024 – May 2024

Engineering Design and Simulation

Normal, AL

- Designed, assembled, and animated a four-bar link mechanism using Solid Edge.
- Generated and displayed source-generating sine wave using Simulink and MATLAB.
- Simulated a mass spring damper system in the time domain using Simulink and MATLAB, improving understanding of dynamic systems.

LEADERSHIP, ACTIVITIES AND HONORS

International Chair, Alabama A&M University (AAMU) National Society of Black Engineers Chapter • AAMU Special Projects Laboratory Member • AAMU Vex Robotics Member • ASME Member • GDSC Member • Dean's List; 2024 • AAMU Presidential Scholarship Award • AAMU Honors Program • TechWise Fellow • ColorStack Member • Codepath Student • Thurgood Marshall College Fund Scholar