### SKILLS

- Programming Skills:
  - o Python, Javascript, C++ Technologies: TensorFlow, Arduino IDE, React.JS, Next.Js:
- Fabrication Skills:
  - 3D Modelling, Slicing and Printing
     Technologies: Solid Works, AutoCAD, UltiMaker Cura :
- Soft Skills:
  - o Strong communication skills, comfortable addressing groups of people and active team player.

#### **PROJECTS**

- Healthcare Service Robot (Grace): For my undergraduate thesis, I am working on building a robot nurse assistant to be used in my university clinic, focusing on autonomous navigation using vSLAM and path planning algorithms.
- Sunflower Solar Tracker System: Captained a team of four Mechatronics Engineering undergraduate colleagues to build a single-axis solar tracker system to maximize solar energy generation, leveraging Arduino and accessible electronic components. Class project.
- Object Detection Fruit Sorting with Edge Impulse: Trained a neural model using Edge Impulse to identify simple fruits in the immediate environment. 90% training performance and 84.62% real-world success rate. Class Project

#### EXPERIENCE

# Armed Forces Electrical and Mechanical Engineering Workshop

Abuja, NG

Research Engineer Intern (SIWES)

Jun. 2024 - Oct. 2024

- Tele-operated Surveillance Bot: Collaborated with other students to assemble a tele-operated bot using ESP32 CAM, Arduino Uno, L298n motor driver, Lipo batteries, and DC motors. Programmed the bot's functionality in C++ via Arduino IDE, with Firebase for real-time communication and React.js for a user-friendly software interface.
  - \* Hardware: ESP32 CAM, Arduino Uno, L298n motor driver, Lipo batteries, DC motors
  - \* Software: Arduino IDE (C++), Firebase, React.js
  - \* Challenges: Software debugging and updating during integration of real-time tele-operation and communication.
- Displacement Estimator: Worked on leveraging an ESP32 dev board and MPU6050 to measure displacement from a starting position. The project was set to trigger measurements based on button clicks or changes in a database value (Firebase) to true.
  - \* Hardware: ESP32 dev board, MPU6050
  - \* Software: Arduino IDE (C++), Firebase, React.js

#### Kola Benz Automobile Workshop

Ilorin, NG

Junior Engineer Intern (SIWES)

Jul. 2023 - Sept. 2023

- Classification, Diagnosis and Repairs: Diagnosed and addressed a variety of automotive issues and worked with a variety of engine types.
- **Knowledge sharing**: Engaged with experienced professionals in a collaborative environment facilitating open communication and knowledge exchange.

## Volunteering

### Lanre Shittu Motors

Abuja, NG

Junior Engineer Intern

Jul. 2022 - Oct. 2022

• Diagnosis, Repairs and Knowledge sharing: As a volunteer, I performed basic automobile servicing operations and assisted senior engineers and technicians in joint repairs.

#### **Publications**

• Enhancing Robotics with Cognitive Capabilities: Proceedings of the AAAI Conference on Artificial Intelligence, 38(21), 23738-23739. https://doi.org/10.1609/aaai.v38i21.30547. AAAI 2024

### Grants

- The 18th European Conference on Computer Vision (ECCV), September 2024: €100
- The IEEE/CVF Conference on Computer Vision and Pattern Recognition 2024, Seattle WA, USA. June 2024: \$1,190
- The 38th Annual AAAI Conference on Artificial Intelligence, Undergraduate Consortium (AAAI-24 UC), Vancouver, Canada. February 2024: Full funding
- 61st Annual Meeting of the Association for Computational Linguistics (ACL), Toronto, Canada. July 2023: \$350

# Memberships & Societies

- IEEE Student Member: Aug. 2024 Present
- IEEE Robotics and Automation Society Member: Aug. 2024 Present
- Black in Robotics Member: Mar. 2024 Present
- AAAI Member: Mar. 2024 Present
- Black in AI Member: Jan. 2024 Present

# LEADERSHIP

- Male Welfare Coordinator, Devotion Unit: Bowen University, 2023 Present
- Sunday School Teacher, Chapel: Bowen University, 2023 Present
- Hall Representative, John Hostel: Bowen University, 2023 2024
- Engineering Students Quality Assurance Male Representative: Bowen University, 2022 2023

### **EDUCATION**

Bowen University Iwo, NG

Bachelor of Engineering in Mechatronics Engineering
Nov. 2022 – Nov. 2025

University of Ilorin

Ilorin, NG

Bachelor of Engineering in Mechanical Engineering — Transferred Sept. 2019 – Oct. 2022