OMOTOYE SHAMSUDEEN **ADEKOYA**

Email Address:
LinkedIn:

GitHub:

EDUCATION

NOV 2023 – PRESENT

PH.D, UNIVERSITA DEGLI STUDI DI GENOVA

ROBOTICS AND INTELLIGENT MACHINES

- Ph.D Theme: Mixed reality strategies for teams of heterogenous robots

SEP 2020 – OCT 2023

MSC, UNIVERSITÀ DEGLI STUDI DI GENOVA

ROBOTICS ENGINEERING

- Thesis Topic: Robust Perception for Effective Robot Planning

SEP 2012 – NOV 2017

BENG, THE FEDERAL UNIVERSITY OF TECHONOLOGY, AKURE

MECHANICAL ENGINEERING

- Mechatronics Option
- Final Project: Design and building of package delivery quadcopter

RESEARCH EXPERIENCE

OCT 2023 – PRESENT

UNIVERSITÀ DEGLI STUDI DI GENOVA

Coordinator: Antonio Sgorbissa, Carmine Recchiuto
Research Theme: Mixed Reality Strategies for teams of Heterogenous Robots.

- Mixed Reality Interface Development for the management of the team of robot
- Develop Collaborative strategies for teams of heterogeneous robots.

JAN 2023 – SEP 2023

UNIVERSITÀ DEGLI STUDI DI GENOVA

Coordinator: Fulvio Mastrogiovanni, Fabio Roli, Alessandro Carfi
Final Thesis: Robust Perception for Effective Robot Planning

- "Attack" the perception system and study how its failure affects the robot planning and action.
- Perform robustness analysis on different robot perception systems and use this analysis to compare different perception solutions.
- Develop new planning strategies that could better behave under perception uncertainties.

SEP 2021

UNIVERSITÀ DEGLI STUDI DI GENOVA

Coordinator: Prof Carmine Recchiuto

Smart City Robotics Challenge (SciRoc) (**The JEMARO team**)

- Designed and programmed the state machine for the behavioral logic of the robot.
- Contributed to the Human Robot Interaction component of the Architecture.
- Won award for the most social robot.

SEP 2016 - NOV 2017

FEDERAL UNIVERSITY OF TECHNOLOGY, AKURE

Mechatronics Laboratory (Federal University of Technology, Akure)

Advisor: Prof Akintunde O. Dahunsi

- Design and fabrication of a package delivery drone
- Design and Simulation of Gantry Robots for carrying a 50 KN load.
- Design and fabrication of an automatic Pantograph using a line following sensor,servo motors, arduino board and some circuitry.

JUNE 2017

CENTRE FOR SPACE RESEARCH AND APPLICATIONS, CESRA (FUTA)

Volunteer Work

• Analysis of CubeSAT data from the CESRA lab.

PROGRAMMING SKILLS

Python

- Excellent python programmer
- Experience with the Python API of **ROS Noetic (Python3)** and all older versions of ROS
- Experienced with **ROS 2 Humble** Python API.
- Experienced with **OpenCV**, also for integration with ROS
- Experience with some python data analytic machine learning and gui libraries like, **matplotlib, NumPy, pandas, PyTorch, YOLO, pygames, Kivy**

C++

- Experience with C++ ROS API
- Unreal Engine game and VR programming.

Rust

- Experience with Rust GUI library, **egui**

PDDL (Planning Domain Definition Language)

- Classical Planning & Temporal Planning
- PDDL+

Javascript

- ES6
- Beginner Vuejs developer
- Experience with ThreeJS for 3D webpages and web-based VR application.

C#

- Experience developing Unity VR applications for Meta Quest 3.

LANGUAGES

- English (Native Speaker)
- Yoruba (Native Speaker)

- Italian (A1)

REFERENCES

- **Prof Maura Casadio**: Associate Professor of Biomedical Engineering at the University of Genoa, Italy.
  Contact: maura.casadio@unige.it
- **Prof Gianni Viardo Vercelli**: Associate Professor at the University of Genoa - Genoa – IT.
  Contact: gianni.vercelli@unige.it