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