

UTHMAN TIJANI

813-697-9223 || uthmantijani@usf.edu || <https://uthmanic.github.io>

RESEARCH INTERESTS

- Robotics
- Human-Robot Interaction
- Artificial Intelligence
- Augmented Reality

EDUCATION

University of South Florida (USF)
Ph.D. in Computer Science and Engineering
Advisor: Prof. Zhao Han

Tampa, FL, United States
Aug 2023 - present

The Federal University of Technology Akure (FUTA)
Bachelor of Engineering, Mechanical Engineering
(Second Class Honors, Upper Division)

Ondo State, Nigeria
2017 - 2023

PUBLICATIONS

- **Uthman Tijani**, Hong Wang, and Zhao Han. 2024. Towards Reproducible Language-Based HRI Experiments: Open-Sourcing a Generalized Experiment Project. In Proceedings of the 2024 ACM/IEEE International Conference on Human-Robot Interaction (HRI '24), March 11–14, 2024, Boulder, CO, USA. ACM, New York, NY, USA, 5 pages. <https://doi.org/10.1145/3610977.3637483>. **Top HRI conference. 61.3% acceptance rate.**

EXPERIENCE

Graduate Research Assistant, University of South Florida
Reality, Autonomy, and Robot Experience (RARE) Lab
Advisor: Prof. Zhao Han

Aug 2023 - present

Graduate Teaching Assistant, University of South Florida
COP 3514 Program Design

Fall 2023

- Graded students' exams and weekly programming assignments.
- Conducted office hours and reviewed exam papers with students.

Liensy Robotics, Lagos, Nigeria
Intern

May 2021 – Oct 2021

- Developed a line follower robot using an Arduino microcontroller
- Implemented MQTT communication protocol on Raspberry Pi to control LEDs using a mobile app
- Designed a CAD model using SOLIDWORKS for four & six-DOF robot arms, and a potato Washing machine in an automated potato chips production line
- Developed a publisher-subscriber node, a service-client node in ROS

Hamoye AI Labs, Hamilton, Bermuda
Data Science Intern

July 2020 – Dec 2020

- Worked on 3 open-source projects: the UK 2016 road safety data - Analysis on traffic accidents in the UK, Mental health in the tech industry - The OSMI survey 2014, and credit card fraud detection

- Developed Neural Networks models of object detection with satellite images to track the human footprint in the Amazon rainforest.
- Built a machine learning classification model for managing the quality metric of global ecological footprint

Lafbart Innovations and Consulting Ltd. Akure, Nigeria

Nov 2019 – Jan 2020

Vehicle Maintenance & Repair Intern

- Carried out scheduled maintenance and repairs (such as ignition and braking system) on various vehicles

TECHNICAL SKILLS

- **Programming Languages:** Python, C/C++
- **Software & Tools:** Linux, ROS, SolidWorks, MATLAB Simulink, Microcontroller/Microprocessors (Arduino and Raspberry Pi)

VOLUNTEER & COMMUNITY SERVICE

JGHC and ITA Culture Exchange Program, USF

Fall 2023

ITA Volunteer

- Facilitated the completion of the "Global Experience Requirement" for JGHC undergraduate students.
- Conducted weekly one-hour meetings, exploring diverse aspects of our respective cultures.

ITA/CSD Volunteer Collaboration, USF

Fall 2023

Volunteer

- Facilitated a valuable exchange where Communications Sciences and Disorders (CSD) undergraduate students benefited from international perspectives on language, while ITAs gained valuable experience in providing personalized language support.
- Paired with an individual CSD student to address specific language aspects such as pronunciation, grammar, vocabulary, fluency, and cultural nuances.

The Solid Path Initiative, Nigeria

2021 – Present

Volunteer

- Worked with a team of 35 members and successfully donated food items to about 100 Muslims in Iju Community, Ondo State, to mark the holy month of Ramadan.
- Participated in prison visitation and meal donations at the Ondo State Custodial Center Olokuta.
- Made monthly monetary contributions to assist ailing and disadvantaged members of the public.

PROFESSIONAL DEVELOPMENT TRAINING AND CERTIFICATION

Institut de Robòtica i Informàtica Industrial, CSIC-UPC, Barcelona

July 2022

Robotics and AI Summer School

Workshop on Deep Learning, Assistive Robotics, Human-Robot Interaction (HRI), and Robots Navigation

Coursera - University of California, Santa Cruz

2022

C for Everyone: Programming Fundamentals

Udacity Online Course

2022

C++ for Programmers

Coursera - University of California San Diego

2022

Algorithmic Toolbox

Udemy Online Course

2022

Microsoft

2021

Microsoft Certified: Azure AI Fundamentals

Data Science Nigeria (DSN)

Sep 2020

AI Boot Camp Qualification Hackathon

Coven Labs. Akure, Nigeria

Dec 2019 – Jan 2020

Data Science and AI Trainee

Africa's Young Entrepreneurs (A.Y.E) Annual Convention

Dec 2019

Poverty Eradication through Entrepreneurial Invention

Nigerian Institution of Mechanical Engineers (NiMechE, Nigerian Society of Engineers)

Oct 2019

The 32nd International Conference and Annual General Meeting

Towards a Modern Manufacturing Technology & Practice for National Economic Growth

TME Education - Transfer Multisort Elektronik, Poland

July 2019

Electronics & IOT Development

Bitgrit FUTA Student Community

July 2019

Data Science and Artificial Intelligence

School of Engineering and Engineering Technology, FUTA

Oct 2018

Course: "Engineers-in-Society"

Symposium: "The Role of Engineers in National Development"

REFERENCES

Professor Zhao Han

Assistant Professor, Department of Computer Science and Engineering,

University of South Florida

Tampa, FL, United States.

zhaohan@usf.edu

Professor O. A. Dahunsi

Senior Lecturer, Department of Mechanical Engineering,

The Federal University of Technology Akure

Ondo State, Nigeria.

oadahunsi@futa.edu.ng

Dr. R.K. Apalowo

Senior Lecturer, Department of Mechanical Engineering,

The Federal University of Technology Akure

Ondo State, Nigeria.

rkapalowo@futa.edu.ng