

UTHMAN TIJANI

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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

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

Fall 2023

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

July 2020 – Dec 2020

Data Science Intern

- 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

HONORS & AWARDS

2024 CRA-WP Grad Cohort Workshop for IDEALS

Jan 2024

Minneapolis, MN

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 Robotics and AI Summer School <i>Workshop on Deep Learning, Assistive Robotics, Human-Robot Interaction (HRI), and Robots Navigation</i>	July 2022
Coursera - University of California, Santa Cruz <i>C for Everyone: Programming Fundamentals</i>	2022
Udacity Online Course <i>C++ for Programmers</i>	2022
Coursera - University of California San Diego <i>Algorithmic Toolbox</i>	2022
Udemy Online Course <i>ROS for Beginners: Basics, Motion, and OpenCV - Prof. Anis Koubaa</i> <i>MATLAB/SIMULINK - Dr. Ryan Ahmed</i>	2022
Microsoft <i>Microsoft Certified: Azure AI Fundamentals</i>	2021
Data Science Nigeria (DSN) <i>AI Boot Camp Qualification Hackathon</i>	Sep 2020
Coven Labs. Akure, Nigeria <i>Data Science and AI Trainee</i>	Dec 2019 – Jan 2020
Africa's Young Entrepreneurs (A.Y.E) Annual Convention <i>Poverty Eradication through Entrepreneurial Invention</i>	Dec 2019
Nigerian Institution of Mechanical Engineers (NiMechE, Nigerian Society of Engineers) The 32nd International Conference and Annual General Meeting <i>Towards a Modern Manufacturing Technology & Practice for National Economic Growth</i>	Oct 2019
TME Education - Transfer Multisort Elektronik, Poland <i>Electronics & IOT Development</i>	July 2019
Bitgrit FUTA Student Community <i>Data Science and Artificial Intelligence</i>	July 2019
School of Engineering and Engineering Technology, FUTA Course: "Engineers-in-Society" Symposium: "The Role of Engineers in National Development"	Oct 2018

REFERENCES

Professor Zhao Han
Assistant Professor, Department of Computer Science and Engineering,
University of South Florida

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Professor O. A. Dahunsi

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