

# Uthman Tijani

📍 3820 USF Alumni Drive, Tampa, FL 33620    📞 813-697-9223  
✉ [uthmantijani@usf.edu](mailto:uthmantijani@usf.edu)    🔗 [uthmanic.github.io](https://uthmanic.github.io)

## Research Interests

Human-robot interaction (HRI), Augmented Reality (AR), Robotics, Artificial Intelligence (AI)

## Education

<b>University of South Florida (USF)</b> <i>Ph.D., Computer Science and Engineering</i> <ul style="list-style-type: none"><li>• Advisor: Professor Zhao Han</li></ul>	Aug 2023 - Present Tampa, FL, USA
<b>The Federal University of Technology Akure (FUTA)</b> <i>Bachelor of Engineering, Mechanical Engineering (GPA: 4.15 / 5.00)</i> <ul style="list-style-type: none"><li>• Thesis Title: Development of a Three-Wheel Mobile Robot Utilizing Differential Drive</li><li>• Advisor: Professor Dahunsi Olurotimi</li></ul>	2017 - 2023 Ondo State, Nigeria

## Publications

- **Uthman Tijani**, Hong Wang, and Zhao Han. “Towards Reproducible Language-Based HRI Experiments: Open-Sourcing a Generalized Experiment Project,” 2024 ACM/IEEE International Conference on HumanRobot Interaction (HRI), 2024. **Top HRI conference. 61.3% acceptance rate (Short Contribution).**
- **Uthman Tijani** and Zhao Han. “Prototyping Mid-Air Display for Anywhere Robot Communication With Projected Spatial AR.” 2024 International Workshop on Virtual, Augmented, and Mixed-Reality for HumanRobot Interactions at HRI 2024 (VAM-HRI), 2024.

## Experience

<b>Reality, Autonomy, and Robot Experience (RARE) Lab, University of South Florida</b> <i>Research Assistant</i> Projects: <ul style="list-style-type: none"><li>• Anywhere Robot Communication with Mid-Air Fog Screen for Spatial AR.</li><li>• Open-source generalized Choregraphe package for Language-Based HRI Experiments.</li></ul>	Aug 2023 - Present Tampa, FL
<b>Liensy Robotics</b> <i>Intern</i> <ul style="list-style-type: none"><li>• Developed a line follower robot using an Arduino microcontroller.</li><li>• Implemented MQTT communication protocol on Raspberry Pi to control LEDs using a mobile app.</li><li>• Designed a CAD model using SOLIDWORKS for four and six-DOF robot arms, and a potato Washing machine in an automated potato chips production line</li><li>• Developed a publisher-subscriber node, a service-client node in ROS</li></ul>	May 2021 – Oct 2021 Lagos, Nigeria
<b>Hamoye AI Labs</b> <i>Data Science Intern</i> <ul style="list-style-type: none"><li>• 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.</li><li>• Developed Neural Networks models of object detection with satellite images to track the human footprint in the Amazon rainforest.</li><li>• Built a machine learning classification model for managing the quality metric of global ecological footprint.</li></ul>	July 2020 – Dec 2020 Hamilton, Bermuda
<b>Lafbart Innovations and Consulting Ltd.</b> <i>Vehicle Maintenance and Repair Intern</i> <ul style="list-style-type: none"><li>• Carried out scheduled maintenance and repairs such as ignition and braking system on various vehicles</li></ul>	Nov 2019 – Jan 2020 Akure, Nigeria

## Honors and Awards

<b>2024 CRA-WP Grad Cohort for Inclusion, Diversity, Equity, Accessibility, and Leadership Skills (IDEALS)</b>	Jan 2024
--	----------

## Grants

---

<b>NSF I-Corps Site subgrant   \$3,000</b>	Jan 2024 – July 2024
<ul style="list-style-type: none"><li>Source: NSF's Innovation Corps (I-Corps) Site at the University of South Florida</li><li>Role: Zhao Han (PI), <b>Uthman Tijani (Entrepreneur Lead)</b>, Hong Wang (Entrepreneur Lead)</li></ul>	
<b>USF Engineering Alumni Society (EAS) Conference Grant   \$250</b>	March 2024
<b>Conference Presentation Grant Program (CPGP), USF Student Government   \$500</b>	March 2024

## Teaching Experience

---

<b>Teaching Assistant, University of South Florida   COP 4710: Database Design</b>	May 2024 - Present
<ul style="list-style-type: none"><li>Held office hours.</li></ul>	
<b>Teaching Assistant, University of South Florida   COP 3515 Advance Program Design</b>	Jan 2024 - May 2024
<ul style="list-style-type: none"><li>Graded quizzes, exams, programming assignments, and held office hours.</li></ul>	
<b>Teaching Assistant, University of South Florida   COP 3514 Program Design</b>	Aug 2023 - Dec 2023
<ul style="list-style-type: none"><li>Graded students' exams and weekly programming assignments.</li><li>Conducted office hours and reviewed exam papers with students.</li></ul>	

## Mentoring

---

### Undergraduate Researchers:

- Adrian Lozada** | *Mid-air fog screen display for robot communication* | May 2024 - Present
- Villa Keth** | *Mid-air fog screen display for robot communication* | May 2024 - Present

## Community Engagement and Leadership

---

<b>JGHC and ITA Culture Exchange Program, University of South Florida</b>	Fall 2023 & Spring 2024
<i>International Teaching Assistant (ITA) Volunteer</i> <ul style="list-style-type: none"><li>Helped with the completion of the Global Experience Requirement for JGHC undergraduate students.</li><li>Engaged in weekly sessions, exploring diverse aspects of our respective cultures.</li></ul>	
<b>ITA/CSD Volunteer Collaboration, University of South Florida</b>	Fall 2023 & Spring 2024
<i>International Teaching Assistant (ITA) Volunteer</i> <ul style="list-style-type: none"><li>Helped Communications Sciences and Disorders (CSD) undergraduate students gain international perspectives and experience in providing personalized language support.</li><li>Paired with an individual CSD student to address specific language aspects such as pronunciation, grammar, vocabulary, fluency, and cultural nuances.</li></ul>	
<b>The Solid Path Initiative, Nigeria</b>	Jan 2021 – April 2024
<i>Volunteer</i> <ul style="list-style-type: none"><li>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.</li><li>Participated in prison visitation and meal donations at the Ondo State Custodial Center Olokuta.</li><li>Made monthly monetary contributions to assist ailing and disadvantaged members of the public.</li></ul>	
<b>FUTA MSSN Final-Year Students</b>	Dec 2021 – April 2023
<i>Financial Secretary</i> <ul style="list-style-type: none"><li>Oversee the association's bank account and keep records of all generated funds and expenses.</li><li>Work with the fundraising team to obtain funding for the construction of the MSSN hostel.</li></ul>	

## Professional Development

---

<b>CRA UR2PhD Graduate Student Mentor Training Program</b>	May 2024 - July 2024
<i>Computing Research Association (CRA) course on effective mentorship and best practices.</i>	
<b>Institut de Robòtica i Informàtica Industrial, CSIC-UPC, Barcelona</b>	July 2022
<i>Robotics and AI Summer School</i> <ul style="list-style-type: none"><li>Workshop on Deep Learning, Assistive Robotics, Human-Robot Interaction (HRI), and Robots Navigation.</li></ul>	
<b>Microsoft Certified: Azure AI Fundamentals</b>	2021
<b>Data Science Nigeria (DSN)   AI Boot Camp Qualification Hackathon</b>	Sep 2020
<b>Coven Labs, Nigeria   Data Science and AI Trainee</b>	Dec 2019 – Jan 2020

## Technical Skills

---

**Languages:** Python, C/C++

**Softwares and Tools:** Linux, ROS, SolidWorks, MATLAB Simulink, Microcontroller/Microprocessors (Arduino and Raspberry Pi)