Linus Ebere Nwankwo

O Home: Jundendorfer Straße 44,, 8700, Leoben, Austria

Email: linus.nwankwo@unileoben.ac.at Phone: (+49) 15215678493

LinkedIn: https://www.linkedin.com/in/linus-nwankwo-1aa62ba9/

ABOUT ME

I am an enthusiastic researcher with a demonstrated history of working in the higher education industry. Currently, I am pursuing my PhD with a focus on SLAM, applications of LLMs and VLMs for HRI, and probabilistic machine learning. My expertise spans across various areas of robotics and machine learning, and I possess strong problem-solving skills. I thrive in collaborative environments and am equally adept at working independently, taking on tasks with minimal supervision.

WORK EXPERIENCE

[10/2021 – Current]

PhD Student.

Montanüniversität, Leoben

Country: Austria

Tasks:

- 1. Conduct novel research toward improving human-robot interaction (HRI) in the real world.
- 2. Develop algorithms for autonomous robot navigation, localisation and mapping.
- 3. Collaborate with other researchers and attend conferences and seminars.
- 4. Teach, supervise, and mentor undergraduate students.

Work hours - (Minimum of 40 hours/week)

[06/2020 - 12/2020]

Research Intern.

Technische Universitat Kaiserslautern

Country: Germany

Tasks:

- 1. Model, simulate and analyse the dynamic behaviour of a mobile inverted pendulum robot (MIPendubot).
- 2. Implement a stabilisation control for the MIPendubot and estimate the pitch angle via complementary filtering technique and the full states via an observer-based approach.
- 3. Investigate the stabilisation control of the robot through a CANopen communication network.

Work hours - (Minimum of 40 hours/week)

[03/2015 - 03/2018]

Mechatronics Instructor and Field Service Engineer.

Skill "G" Nigeria Limited

Country: Nigeria

Tasks:

- 1. Feasibility studies of laboratories & workshops across 73 universities in Nigeria.
- 2. Install Skill 'G"s robotic, 3D printing, CNC machines, and hydraulic, and pneumatic training systems.
- 3. Train our clients on the operation and use of the equipment.
- 4. Provide technical support including testing, troubleshooting and resolving queries.
- 5. Led team for the equipment delivery & installation.

Work hours - (Minimum of 40 hours/week)

$\begin{tabular}{l} [03/2014-02/2015]{lighter of the content of$

Cifman Institute of Technology & Management

Country: Nigeria

Tasks:

1. Organize and deliver lectures to students on computer hardware, software and programming.

Work hours - (Minimum of 35 hours/week)

EDUCATION AND TRAINING

[09/2018 - 12/2020]

Master of Science (MSc), Automation and Robotics.

Université Bourgogne Franche-Comté (UBFC) https://www.ubfc.fr/

Address: 32 Av. de l'Observatoire, 25000, Besançon, France

[08/2007 - 08/2012]

Bachelor of Engineering (B. Eng.) in Electronic, Computer and **Telecommunication Engineering.**

Nnamdi Azikiwe University https://unizik.edu.ng/

Address: Along Enugu-Onitsha Expressway, Ifite Road, 420110, Awka, Nigeria

DIGITAL SKILLS

Language Skills

English - Fluent | German - A2 | French - A1

Google/Office Tools

Google Suite (Doc, Slides, Form, Sheet, Drive) | Microsoft Office | Overleaf & LaTeX

CAD Tools

SolidWorks, Fusion 360, AutoDesk Inventor, Solid Edge

Programming Skills and Tools

C++, Python, MATLAB, HTML, CNC (G & M Codes) | ROS, PyCharm, Visual Studio Code, Notepad++

OS and Microcomputers

Linux, Windows | Nvidia Jetson, Arduino, Intel NUC, Raspberry Pi

PUBLICATIONS

The Conversation is the Command: Interacting with Real-World **Autonomous Robot Through Natural Language**

This paper is currently accepted for publication and presentation at the 19th Annual ACM/IEEE International Conference on Human Robot Interaction (HRI), 2024, Boulder, Colorado, USA.

[2023] ROMR: A ROS-based open-source mobile robot

Publisher: Elsevier HardwareX - ScienceDirect.com

[2023] Understanding Why SLAM Algorithms Fail in Modern Indoor Environments

Publisher: Springer - Mechanisms and Machine Science

CONFERENCES AND SEMINARS

[14/06/2023 - 16/06/2023] **32nd International Conference on Robotics in Alpe-Adria Region (RAAD)**

Bled, Slovenia

Link: https://raad.ijs.si/

[03/07/2023 – 07/07/2023] **9th International Summer School on AI and Big Data** Dresden, Germany **Link:** https://scads.ai/education/summer-schools/summer-school-2023/

HONOURS AND AWARDS

[2023] **Best Student Paper Award. Awarding institution:** International Conference on Robotics in Alpe-Adria Region (RAAD).

Link: https://cps.unileoben.ac.at/wp/Award_RAAD2023_Linus.jpg

- [2020] **International Mobility scholarship. Awarding institution:** Region Bourgogne Franche-Comte, France.
- [2019] **I-Site Scholarship. Awarding institution:** Universite Bourgogne Franche-Comte (UBFC), France.
- [2005] **NMC/PTDF Mathematics Incentive Award. Awarding institution:** National Mathematical Centre, Abuja, Nigeria.

HOBBIES AND INTERESTS

Reading, hiking, cooking, and surfing the internet for news and updates on technology & artificial intelligence