

# CLINTON O. ENWEREM

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## RESEARCH INTERESTS

Robotics, Control Theory, Machine Learning.

## EDUCATION

### University of Maryland, College Park

*Ph.D., Electrical & Computer Engineering*  
• Specialization: Robotics.

MD, USA

Expected May 2026

*Advisor: Professor John S. Baras.*

### University of Nigeria, Nsukka

*Bachelor of Engineering, Electrical Engineering*, Highest Honors  
• Majors: Control Theory, Electrical Drives.

Enugu, Nigeria

Graduated Aug 2018

*Advisor: Udoka C. Nwaneto, MSc, EIT.*

## RESEARCH EXPERIENCE

### University of Maryland, College Park

*Graduate Research Assistant*, Institute for Systems Research

- Research Focus: Dexterous Grasping & Manipulation, Trusted Autonomous Systems.
- Advisor: Professor John S. Baras, *Distinguished University Professor & Endowed Lockheed Martin Chair in Systems Engineering*.

MD, USA

Aug 2021 – Present

### University of Nigeria, Nsukka

*Graduate Research Assistant*, Control & Instrumentation Lab – EE Department

- Research Themes: Robust Control, Observer-Based Compensator Design, Feedback Linearization.
- Supervisor: Ihechiluru Okoro, MSc.

Enugu, Nigeria

Sep 2018 – Dec 2020

*Undergraduate Research Assistant*, Control & Instrumentation Lab – EE Department

- Research Themes: Feedback Control, Time-Delayed Systems, System Identification.
- Supervisor: Ihechiluru Okoro, MSc.

Aug – Oct 2017

## PROFESSIONAL EXPERIENCE

### University System of Maryland, Southern Maryland

*Summer Intern*

- Theme: Intelligent control of a swarm of unmanned micro aerial vehicles.
- Supervisor: Dr. Danilo Romero

MD, USA

June 2022 – Present

### Robotics & Artificial Intelligence Nigeria

*Robotics Trainee*

- Engineering co-lead for the autonomous Ground Robot Messenger project: Carried out the high-level design, hardware development, and visual SLAM project aspects (*Tools: Python, ROS, Bash, OpenCV, MS Visio*).
- Prototyped a low-cost [flight control and communications system](#) for a quadrotor delivery drone as part of a team (*Tools: C++, SolidWorks, MultiWii*).
- Developed software for an [obstacle-avoiding, teleoperable, and ROS-compliant](#) mini ground vehicle equipped with a single-board computer and a ranging sensor (*Tools: Python, ROS, Bash*).

Ibadan, Nigeria

Mar 2020 – Feb 2021

## SKILLS

- Robotics Tools: ROS, Gazebo, RViz, MoveIt!, CoppeliaSim, MuJoCo.
- Programming languages and math packages: Matlab, Python, C++, Git,  $\text{\LaTeX}$ , Bash, Web (HTML5/CSS), OpenCV.
- Control: System Identification, SISO and MIMO Controller Design.

## PUBLICATIONS

### Journal Papers

- I. Okoro and C. Enwerem, “Robust Control of a DC Motor,” *Heliyon*, vol. 6, no. 12, pp. 1-8, 2020, doi: [10.1016/j.heliyon.2020.e05777](https://doi.org/10.1016/j.heliyon.2020.e05777).

### Conference Papers

- I. Okoro and C. Enwerem, “Model-based Speed Control of a DC Motor Using a Combined Control Scheme,” *2019 IEEE PES/IAS PowerAfrica*, Abuja, Nigeria, 2019, pp. 1-6, doi: [10.1109/PowerAfrica.2019.8928856](https://doi.org/10.1109/PowerAfrica.2019.8928856).

## COURSEWORK

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- Doctoral: Convex Optimization, System Theory (Fall 2021); Nonlinear Control Systems, Optimal Control (Spring 2022).
- Postbaccalaureate Training: Advanced Control Theory for Mobile Robots, AI for Humanoid Robotics, Control Theory & IoT (2020).

## HONORS & AWARDS

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- [Finalist](#), Engineers League, Pan-African Robotics Competition, Rwanda - Team Kognitive Robotics. 2021
- [CIT Dean's Fellowship](#), Carnegie Mellon University, Africa Campus (\$14000 in tuition for an MS in ECE). 2021
- Dean's Fellowship, University of Maryland, College Park, MD, United States. 2021
- Scholar, Stanford Exposure to Research and Graduate Education (SERGE), Stanford University, CA, USA. 2020
- Recipient, [Opportunity Funds Program Scholarship](#), EducationUSA, US Consulate General. 2020

## EXTRACURRICULAR ACTIVITIES

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- Member, [Black in Robotics](#) – a U.S. organization that promotes Black representation in robotics. Oct 2020 – Present