Clinton Enwerem

Research Interests

Multiagent Systems, Distributed Control, Robotics.

Education

2021-Date **PhD, Electrical & Computer Engineering**, *University of Maryland*, College Park, MD, USA
GPA: 3.68/4. Expected May 2026. Advisor: Professor John S. Baras.

2014-2018 **B.Eng., Electrical Engineering**, *University of Nigeria*, Nsukka, Enugu, Nigeria
GPA: 3.84/4 (First-Class Honors). Emphasis: Control Theory.

Selected Publications

Draft/Submitted/In-Review Articles

2023 **Clinton Enwerem** and John S. Baras. Formation Tracking for a Class of Uncertain Multiagent Systems: A Distributed Kalman Filtering Approach, May 2023.

2023 **Clinton Enwerem**, John S. Baras, and Danilo Romero. Distributed Optimal Formation Control for an Uncertain Multiagent System in the Plane, January 2023.

In Conference Proceedings

2023 **Clinton Enwerem** and John S. Baras. Consensus-Based Leader-Follower Formation Tracking for Control-Affine Nonlinear Multiagent Systems. *To appear in the 2023 International Conference on Control, Decision and Information Technologies (CoDIT)*, 2023.

2019 Ihechiluru Okoro and **Clinton Enwerem**. Model-based Speed Control of a DC Motor Using a Combined Control Scheme. *2019 IEEE PES/IAS PowerAfrica*, pages 1–6, August 2019.

Journal Articles

2020 Ihechiluru S. Okoro and **Clinton O. Enwerem**. Robust control of a DC motor. *Heliyon*, volume 6, December 2020.

Research Experience

Institute for Systems Research (ISR), University of Maryland

Aug. 2021-Date **Graduate Research Assistant**
Research Foci: Networked Multiagent Systems, Trusted Autonomy, Robust Robot Control.

Electrical Engineering Department, University of Nigeria, Nsukka

Sep. 2018-Mar. 2021 **Research Assistant**
Research Topics: Robust Control, Observer-Based Compensator Design, Feedback Linearization.

Aug.-Oct. 2017 **Undergraduate Research Assistant**
Research Topics: Feedback Control, Time-Delayed Systems, System Identification.

Professional Experience

ISR & University System of Maryland at Southern Maryland, California, MD

Jun.-Aug. 2022 **Research Intern**
Worked in collaboration with the MATRIX Lab on problems encompassing multi-agent cooperative control, formation control, and target tracking under uncertainty.
Supervisor: Dr. Danilo Romero.

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GitHub LinkedIn Google Scholar

Robotics & Artificial Intelligence Nigeria (RAIN), Ibadan, Nigeria

Mar. 2020-Feb. 2021 **Robotics Trainee**
Saw varied robotics and IoT projects through hardware and software development stages comprising computer-aided design, prototyping, firmware and controls, and testing.

Honors & Awards

2022 2022-2023 Microsoft Diversity in Robotics & Autonomy PhD Fellowship.
2022 ROSCon Diversity Scholarship: Travel grant to attend ROSCon 2022 in Kyoto, Japan.
2021 Finalist, Engineers' League, Pan-African Robotics Competition, Rwanda.
2021 CIT Dean's Fellowship, Carnegie Mellon University, Africa Campus, Kigali, Rwanda.
2021 Dean's Fellowship, University of Maryland, College Park, MD, United States.
2020 Scholar, Stanford Exposure to Research & Graduate Education, Stanford University, CA, USA.
2020 EducationUSA Opportunity Funds Program Scholarship, U.S. Consulate General, Lagos, Nigeria.
2020 Sole Recipient (Nationwide), Door Foundation Leadlight Scholarship, RAIN.
2016-2018 Agbami Science & Technology Scholarship, Chevron: Merit-based undergraduate scholarship.
2015-2018 MTN Foundation Scholarship: Merit-based undergraduate scholarship.

Technical Skills

Robotics **Tools**: ROS/ROS2, Gazebo, RViz, MoveIt!; **Robots**: Crazyflie 2.X, Turtlebot2.
Engineering MCUs, Prototyping, Altium Designer, SolidWorks, Fusion 360.
Programming Matlab, C/C++, Python, Bash, LaTeX, Tk.
Frameworks Jupyter, TensorFlow, OpenCV.
Optimization Gurobi, Pyomo.
Web HTML, CSS, JavaScript, Markdown.
OS Linux, Windows.
Version Control git, GitHub, GitLab.

Relevant Courses

Doctoral

Spring 2023 Network Control Systems, Decision Making Under Uncertainty: RL, Control, & Games.
Fall 2022 Random Processes, Advanced Digital Signal Processing.
Spring 2022 Nonlinear Control Systems, Optimal Control.
Fall 2021 System Theory, Convex Optimization.

Open Courseware

Fall 2022 Aerial Robotics by the University of Pennsylvania.
Summer 2022 Autonomous Navigation for Flying Robots by the Technical University of Munich.
Spring 2022 Principles of Robot Autonomy I & II by Stanford University.

Academic Service

2023 Reviewer, Mediterranean Conference on Control and Automation.

Outreach & Mentoring

2021-Date Member, Black in Robotics (BiR): BiR is a U.S. organization dedicated to promoting Black representation in robotics.
2021-2022 Mentor, EducationUSA and the iScholar Initiative: provided guidance to outstanding STEM college graduates from underrepresented backgrounds, which culminated in their securing full-ride U.S. grad admission offers.