Adedayo Akinade

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EDUCATION

Monash University	**In-Progress Ph.D.**, Electrical and Computer Systems Engineering
Carnegie Mellon University	2024 **M.Sc.**, Electrical and Computer Engineering
Federal University of Agriculture, Abeokuta	2021 **B.Eng.**, Mechatronics Engineering

RESEARCH EXPERIENCE

My research areas are soft robotics, robot learning, dextrous manipulation, and tactile sensing,

Monash University Electrical and Computer Systems Engineering Department (Melbourne, VIC, Australia)	02/2025 – now	**Graduate Research Assistant** Supervisors: Dr. Juxi Leitner and Dr. Michael Burke
Carnegie Mellon University Africa AI and Robotics Laboratory (Kigali, Rwanda)	9/2023 – 6/2025	**Research Associate** Supervisor: Prof. David Vernon
Swiss Federal Technology Institute of Lausanne BioRobotics Laboratory (Lausanne, Switzerland)	6/2023 – 9/2023	**Graduate Research Assistant** Supervisor: Prof. Auke Ijspeert

TEACHING EXPERIENCE

Monash University Electrical and Computer Systems Engeering Department (Pittsburgh, PA, USA)	07/2025 – 11/2025	**Graduate Teaching Assistant** Course: Intelligent Robotics Supervisor: Dr. Juxi Leitner
Carnegie Mellon University Electrical and Computer Engeering Department (Kigali, Rwanda)	01/2024 – 12/2024	**Graduate Teaching Assistant** Courses: Robotics, Principles and Practice; Cognitive Robotics; Embedded Systems Supervisors: Prof. David Vernon; and Prof. Emmanuel Ndashimye
Carnegie Mellon University Electrical and Computer Engeering Department (Pittsburgh, PA, USA)	08/2023 – 12/2023	**Graduate Teaching Assistant** Course: Introduction to Embedded Systems Supervisors: Prof. Gregory Kesden and Prof. Mark Budnik

INDUSTRY EXPERIENCE

Automation and Engineering Academy Mechatronics Engr. Department	09/2020 – 08/2022	**Mechatronics Engineer** Supervisor: Engr. Adewale Ikotun
LinkServe Consultants Research & Development Department	01/2020 – 09/2020	**Research Engineer** Supervisor: Engr. Afeez Ishola
HIC MikroLAB Embedded Systems Department	09/2018 – 02/2019	**Intern** Supervisor: Ibrahim Ogunbayo

PUBLICATIONS AND PAPERS

Papers with future venues are accepted to appear in them.

Peer-Reviewed Journal Articles

Biological Motion Aids Gestural Communication by Humanoid Social Robots. Adedayo Akinade, Daniel Barros, and David Vernon. *International Journal of Humanoid Robotics, 22(2), pp 2550001*, 2025.

Culturally competent social robots target inclusion in Africa. Adedayo Akinade, Yohannes Haile, Natasha Mutangana, Conrad Tucker, and David Vernon. *Science Robotics, 8*, 2023.

Development of a Solar-Powered Smart Iot-Based Egg Incubator for Small-Scale Poultry Farmers. S.O. Owoeye, F.O Durodola, S.A Akinade, T. Farinde, and O. Sulaimon. *Ife Journal of Information and Communication Technology, 6(1), pp 46- 53*, 2022.

Development of a real-time framework for farm monitoring using drone technology. Oyelami Adekunle, Adedayo Akinade, Obianefo Kingsley. *AES International Journal of Robotics and Automation (IJRA), 9*, 2020.

Peer-Reviewed Conference Proceedings

Design And Implementation of A Hand Gesture Controlled Trolley. Samuel Owoeye, Adedayo Akinade, Folasade Durodola and Samad Bello. In *Proceedings of the Twentieth Nigerian International Materials Congress*, 2021.

Development of A Fire Extinguishing Robot with SMS Alert Feature. Samuel Owoeye, Adedayo Akinade, Folasade Durodola, Olaitan Olaonipekun, Benedict Anyanwu, Jethro Odeyemi. In *Proceedings of the College of Engineering 3rd International Conference, FUNAAB*, 2021.

Book Chapters

Enhancing the Human-Computer Interaction through the Application of Artificial Intelligence, Machine Learning, and Data Mining. Akinade, A. S., Owoeye, S. O., Adenuga, K. I., and Mustapha, H. A. In *Human-Computer Interaction and Beyond: Advances Towards Smart and Interconnected Environments*, 2022.

Healthcare monitoring through IoT: security challenges and privacy issues. S.O. Owoeye , A.S. Akinade , K.I. Adenuga , and F.O. Durodola. In *Healthcare Monitoring and Data Analysis using IoT: Technologies and applications*, 2022.

Peer-Reviewed Conference Poster Abstracts

Culturally Sensitive Social Robotics for Africa. A. Akinade, D. Barros, M. Danso, Y. Haile, E. Birhan, B. Shimelis Girma, C. Osano, P. Ranchod, M. Richard, B. Rosman, I. Jimoh, T. Taye Tefferi, and D. Vernon. In *Cultural Robotics: Diversified Sustainable Practices, Workshop at IEEE/ACM HRI 2025*.

Biological Motion for Gestural Communication by Social Robots. Adedayo Akinade and David Vernon. In *Robotics in Africa Forum at the 2024 IEEE/RSJ International Conference on Intelligent Robots and Systems*, 2024.

Biological Motion for Gestural Communication by Social Robots. Adedayo Akinade and David Vernon. In *Robotics in Africa Forum at the 2024 IEEE/RSJ International Conference on Intelligent Robots and Systems*, 2024.

Peer-Reviewed Workshop Proceedings

Culturally Sensitive Social Robotics for Africa. A. Akinade, D. Barros, M. Danso, Y. Haile, E. Birhan, B. Shimelis Girma, C. Osano, P. Ranchod, M. Richard, B. Rosman, I. Jimoh, T. Taye Tefferi, D. Vernon. In *Proceedings of the 2nd International Workshop on Cultural Robotics: Diversified Sustainable Practices, IEEE/ACM HRI 2025, Springer LNAI*. Submitted for publication.

PROJECTS

- CSSR4Africa – Culturally Sensitive Social Robotics for Africa, 2023-2025
- Extending the CRAM cognitive architecture on the PR2 robot, CMU, 2023
- Incremental reinforcement learning for humanoid robots, CMU, 2023
- Development and deployment of Navigation Software for Pepper Humanoid Robot, CMU, 2023
- Design and Development of a Control System for Intelligent Traffic System, 2022
- Automatic Water Refill System for the College of Engineering, FUNAAB, 2021
- Autonomous Fire Extinguishing Robot, 2020
- Solar-powered drone for Real-Time Farm Monitoring with SMS Alert Capabilities, 2020
- Gesture Controlled Trolley, 2020
- Model Design of an Automatic Controlled Gate System, 2018
- Automatic Climatic Condition Monitoring for Greenhouse, 2018

AWARDS AND FELLOWSHIPS

- The best-graduating student, Department of Mechatronics Engineering, FUNAAB, 2021
- Overall best-graduating student, College of Engineering, FUNAAB, 2021
- Best Intern, Automation and Engineering Academy, 2021

SERVICE

- Vice President of IoT Students Club, Carnegie Mellon University, 2023.
- Undergraduate Student representative, College of Engineering, FUNAAB, 2014-2019.