

Education

- 2025–Present **PhD in Cognitive and Computational Neuroscience**, *Max Planck School of Cognition*, Leipzig, Germany
Advisors: Prof. Jürgen Jost and Dr. Andrej Bičanski
- 2023–2024 **MSc in Artificial Intelligence and Adaptive Systems**, *University of Sussex*, Brighton, UK
Advised by: Dr. Adam B. Barrett
- 2009–2014 **B.Eng. in Mechanical Engineering**, *Ahmadu Bello University*, Zaria, Nigeria
Advised by: Prof. Laminu S. Kuburi

Research Experience

- 2025–Present **Doctoral Researcher**, *Neural Computation Group, Max Planck Institute for Human Cognitive and Brain Sciences*, Leipzig, Germany, with Dr. Andrej Bičanski
- 2025–Present **Doctoral Researcher**, *Geometry and Complex Systems Group, Max Planck Institute for Mathematics in the Sciences*, Leipzig, Germany, with Prof. Jürgen Jost
- 2024–2025 **Research Collaborator**, *MESEC, Mediterranean Society for Consciousness Science*, Corsica, France, with Prof. Guillaume Dumas
Project: *Exploring Consciousness through Social Interactions: A Neuro-AI Approach*
- 2023–2024 **Research Assistant**, *Sussex Centre for Consciousness Science, University of Sussex*, Brighton, UK, Department of Informatics, with Dr. Adam B. Barrett
Project: *Complexity Measures and States of Consciousness*
- 10/2023–01/2024 **Lab Assistant**, *Future Technology Lab., University of Sussex*, Brighton, UK, with Dr. Chris Johnson
Project: *Towards Adaptive Machines: Synaptic Homeostasis in Robotics*
- 2012–2014 **Teaching Assistant**, *Ahmadu Bello University*, Zaria, Nigeria
Conducted tutorials in Mathematics, CAD, and Programming.

Industry Experience

- 02/2020–09/2023 **Data Specialist**, *UBA Group*, Lagos, Nigeria
Led large-scale analytics; built ML models and statistical pipelines to improve decision-making.
- 06/2019–10/2019 **Data Analyst Intern**, *Dataville Research LLC*, Lagos, Nigeria
Analysed regional survey data and developed monitoring dashboards for NGOs.
- 2018–2022 **Creative Director & CTO**, *HabincciHub*, Lagos, Nigeria, Hybrid
Co-founded an agri-tech startup; led technical development and product execution.

Publications and Preprints

- 2024 **Odan, S.**, & Barrett, A. (Supervisor). *Complexity Measures in Diverse Dynamical Regimes and Their Application to States of Consciousness*. *Mathematical and Computational Biology*. DOI.
- 2024 **Odan, S.** *Metaheuristic Method for Solving Systems of Equations*. *Neural and Evolutionary Computing (cs.NE)*. arXiv.

Conferences and Talks

- 2026 **Talk**, *Head-Direction Coding in Complex Terrain*, Neural Geometry Workshop, Max Planck Institute for Mathematics in the Sciences, Leipzig
- 2025 **Talk**, *Statistical Complexity Distinguishes Different States of Consciousness*, Harnack Haus, Berlin, Germany, Max Planck School of Cognition — Welcome Days
- 11/2024 **Poster**, *Statistical Physics of Cognition Workshop*, Institute of Physics, London, UK
- 10/2024 **Poster**, *SCCS New Lab Launch*, University of Sussex, Brighton, UK
- 09/2024 **Talk**, *MESEC Workshop 2024*, Corsica, France, Chair: Prof. Thomas Metzinger
- 06/2024 **Poster**, *Sussex AI Day*, University of Sussex, Brighton, UK

Awards and Scholarships

- 2023 Sussex Nigeria Scholarship, University of Sussex
- 2012 Innovative Young Engineers Award, Nigerian Society of Engineers
- 2003–2006 Full Scholarship, Christ Comprehensive Schools, Kaduna

Extracurricular Activities

- 2024–Present Member, Mediterranean Society for Consciousness Science (MESEC)
- 2024–Present Founding Member, Consciousness Society Sussex

Personal

- Languages English (Fluent), Igbo (Native), German (Basic)
- Google Scholar [Google Scholar Profile](#)