

AYOBAMI EMMANUEL OMOLUSI

PHD RESEARCHER IN COLLECTIVE INTELLIGENCE | MIGRATION, SOCIAL DYNAMICS & POLICY

[GitHub](#) | [LinkedIn](#) | [Email](#)

PROFESSIONAL PROFILE

PhD candidate in Collective Intelligence at Mohammed VI Polytechnic University (UM6P), with a research focus on migration, social networks, and decision-making under uncertainty. I study how digitally mediated social networks shape migration behavior, emphasizing collective intelligence, peer influence, and platform-driven coordination. My work combines computational social science, network analysis, and computational modeling to understand collective decision-making in migration systems, to inform migration governance and the design of inclusive digital systems. I bring a background in machine learning, AI for social systems, and community engagement across African contexts.

EDUCATION

PhD Candidate in Collective Intelligence

Mohammed VI Polytechnic University (UM6P), Rabat, Morocco | 2024 – Present

- Research on migration, collective decision-making, and social dynamics in African and Sub-Saharan migrant contexts
- Applies a social networks and collective behaviour lens to migration aspirations and choices
- Designed to inform migration and displacement governance, with relevance for children and young people on the move
- Abstract accepted at the *ACM Collective Intelligence Conference 2025 (USA)*

Master's Degree in Collective Intelligence

Mohammed VI Polytechnic University (UM6P), Rabat, Morocco | 2022 – 2024

(Distinction)

- Thesis: Detection of Vocalizations using Wave-U-Net and ICA
- OCP Excellence Scholarship & Ibn Rochd Foundation Award

Bachelor of Science (B.Sc.) in Chemistry

University of Ibadan, Nigeria | 2016 – 2020

(Second class Hons, Upper division-5.2/7.0 (WES-3.36/4.00))

- Ekiti State Scholarship awardee; peer tutor for Mathematics

RESEARCH AND POLICY-RELEVANT EXPERIENCE

Graduate Research Assistant – Horizon Europe Project (WP2) | 2023 – 2024

Mohammed VI Polytechnic University | Advisor: Dr. Amir Abdul Reda

- Contributed to a Horizon Europe project analysing migration decision-making and social-media-driven information environments

- Conducted desk research and analysis on social influence, narratives, and migration aspirations
- Prepare structured research summaries and policy-relevant analyses for international collaborators
- Support coordination and knowledge exchange across partner institutions

Doctoral Research – Collective Intelligence & Migration Networks

UM6P, 2024–Present

- Investigating digitally mediated migrant networks as informal governance systems
- Conducted pilot study of Nigerian migrants in Morocco (n=34) using SNA & qualitative interviews
- Research presented at DISI 2025 and IMISCOE PhD Academy

YOUTH, ORGANIZATIONAL, AND COMMUNITY ENGAGEMENT

Mentor – UNICEF-UNV Youth on the Move Programme June 2025 – Dec 2025

- Selected as a peer mentor within an UN-affiliated youth programme supporting refugees and displaced young people
- Provide structured mentorship on academic writing, digital skills, and education pathways, aligned with programme objectives
- Support education and scholarship planning, including goal setting and progress tracking over time
- Contribute to youth empowerment and inclusion within a forced displacement context, while working within established safeguarding, reporting, and accountability frameworks

Teaching Assistant – History & Philosophy of Collective Intelligence

UM6P | School of Collective Intelligence- 2024 – Present

- Support the delivery of an interdisciplinary graduate-level course once a week
- Manage Canvas LMS, including materials, assignments, announcements, and student coordination
- Assist with course organisation, readings, and assessment logistics
- Serve as a key coordination link between faculty and students
- Maintain accurate documentation and support a structured learning environment

Co-Founder & Chief Operating Officer – Revolving City

International | Youth-Led Initiative

2021 – Present

- Co-founded and oversaw operations for a platform connecting African youth to global education and opportunity pathways
- Lead internal coordination, administrative systems, and operational planning
- Manage volunteer teams, workflows, and budgeting processes
- Support youth empowerment through access to information, mentorship, and capacity-building resources

Community Engagement & Migration Support (Volunteer) | 2023 – Present

AMCOS, Morocco

- Engage closely with Sub-Saharan African migrant communities in Morocco
- Provide informal guidance, coordination support, and mentorship
- Develop grounded, lived insight into the everyday realities, challenges, and aspirations of migrants in transit

PAPERS

- Omolusi, A. E., & Moussaid, M. (2025). The influence of social dynamics on migration patterns and destination choices: Examining collective systems from small groups to large crowds. *Journal of the ACM*, 37(4), Article 111. (Conference Paper)
- Olubayode, E. O., & Omolusi, A. E. (2023). AI-powered digital therapeutics for personalized, exercise-based interventions. Preprint published on ResearchGate. <https://doi.org/10.13140/RG.2.2.34959.15523>
- Babatunde, I. D., Omolusi, A. E., & Ridwan, E. (2024). Crowd computing: Harnessing the wisdom of the crowd in idea prioritization. Working paper, Mohammed VI Polytechnic University. <https://doi.org/10.13140/RG.2.2.22274.66241>
- Ibidunmi, R., & Omolusi, A. E. (2023). Creating a better Yoruba language learning app: Leveraging collective intelligence and experience. *Open Science Framework (OSF) Preprint*. <https://doi.org/10.31219/osf.io/an6sm>
- Ezirim, A., Omolusi, A. E., Gbadamosi, R., & Ibidunni, R. (2023). Examining variations in argument forms through transmission chains. Preprint published on ResearchGate. <https://doi.org/10.13140/RG.2.2.22694.09284>

NETWORKS AND PROFESSIONAL AFFILIATIONS

- IMISCOE PhD Academy – 2025 Cohort
- UNICEF-UNV Youth on the Move Program – Peer Mentor
- Diverse Intelligences Summer Institute (DISI) – 2025 Fellow
- Association of Computing Machinery (ACM)
- African Mission Community Outreach and Support (AMCOS)- 2023 – Present
- Research Data Science
- Committee on Data, International Science Council
- Data Science Nigeria (DSN)

HONOURS AND AWARDS

- Excellence Scholarship by OCP Foundation 2022
- IBN ROCHD Foundation Scholarship Holder
- for Science and Innovation 2022
- Outstanding President, Community Development Service, Mbo LG, Akwa-Ibom State, Nigeria. 2022
- Ekiti State Scholarship for Outstanding Students in Tertiary Institutions. 2018
- Awardee of Peer Assisted Study Tutor for outstanding Students in Mathematics (Calculus), University of Ibadan, Nigeria. 2017

CONFERENCES AND SCHOOLS

- GAPS Conference on Return Migration (Governance, Accountability & Policy) – Accepted Presenter (2026)
- ACM Collective Intelligence Conference – Abstract Accepted (2025)
- CERC Migration Winter School – 2025
- Deep Learning Indaba – Presenter, Tunisia (2022)

CORE SKILLS

Methods & Tools:

- Survey design, social network analysis (SNA), agent-based modeling, thematic coding, topic modeling
- Python (pandas, NumPy, scikit-learn), R, SQL, Tableau, Gephi, NVivo
- Machine Learning (NLP, LLMs, ICA, computer vision)
- Digital ethnography, participatory research

Programming, Tools & Domain Expertise

- Python and R for data analysis and modelling
- SQL, Tableau
- Network analysis and visualization (e.g., Gephi)
- Social media and text data analysis
- Migration, border studies, and collective behaviour research

Domains of Expertise:

- Migration & mobility studies | Social systems & AI | Platform governance | Collective behaviour

LANGUAGES

English – Proficient | Yoruba – Native | French – Basic knowledge