


Ethel Elikem Afi Mensah

Scientific Researcher



Contact Info

-  Campus E 1.7, R 3.03
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Key Competencies

- Programming languages: Python, SQL
- Data skills: Extraction, Mining, Analysis and Processing
- GeoSpatial: QGIS

Personal Info

- Date of Birth: 27.02.1998
- Nationality: Ghanaian

Honors

- MasterCard Foundation Scholarship**
Fully-Funded Scholarship to Pursue Master’s Degree (AIMS Rwanda)
08/2021 – 06/2022
- Integrity Award**
AIMS Rwanda
06/2022

PROFILE

I am an early-career researcher passionate about the intersection of computational methods and social equity. My work explores how location based online services, such as Google Maps, reflect and reinforce social patterns of segregation, access, and representation in urban environments. By combining geospatial data, online trace data, and demographic analysis, I aim to produce insights that can inform ethical AI design, inclusive policy, and community-focused interventions.

Research Interests: Societal Computing, Urban Informatics, Digital trace data

EDUCATION

Saarland University
PhD Preparatory Phase
Major Courses:

- Artificial intelligence
- Data Networks
- Data Science
- Algorithm and Data Structures

Since
10/2023

African Institute for Mathematical Sciences (AIMS)
Master in Mathematical Sciences (Data Science)
CGPA: Distinction
Thesis: Time-dependent Route Optimization for a Public Bus in a City Area
modelled a time-dependent bi-criteria bus routing problem to find optimal paths for a bus from an origin to a destination in a road network and produced a thesis in partial fulfilment of my master's degree under the supervision of Professor Pu Li of the Technical University of Ilmenau, Germany.

08/2021-
06/2022

University of Ghana, UG
Bachelor in Economics and Mathematics
CGPA: 3.53/4.0
Thesis: An Introduction to Evolutionary Game Theory: Replicator Dynamics in 2x2 Symmetric Games
Studied Replicator Dynamics as a model to predict the evolutionary stability of strategies in two-by-two symmetric games my bachelor's degree thesis.

09/2016 -
07/2020

PUBLICATIONS

International AAAI Conference on Web and Social Media
Mensah, E. E., Cannanure, V. K., & Weber, I. (2025). *Ethnic Diversity and Spatial Dynamics in Google Maps Reviews: Insights from a German Border City.* ICWSM 2025.
<https://doi.org/10.1609/icwsm.v19i1.35964>

06/2025

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References

Prof. Ingmar Weber
AvH Professor for AI @ Saarland University

 iweber@cs.uni-saarland.de

Dr. D.S.c Abebe Geletu
German Research Chair @ AIMS Rwanda

 abebe.geletu@aims.ac.rw

Certificates

ALX and Udacity
Certificate: Data Analyst Nanodegree
05/2022-07/2022

European School of Management and Training, ESMT Berlin (2022)
Certificate: Business Management
07/2022

WORK EXPERIENCE

Interdisciplinary Institute for Societal Computing Since 10/2023
Scientific Researcher

- Work with Location Based Online Services, such as Google Maps for analysis of social phenomena
- Collaborate with social scientists and data engineers to explore ethical questions in platform-based urban data
- Collaborations with relevant Stakeholders in various Sectors to produce Transformative Research

Ishango.ai 10/2022 - 09/2023
Data Scientist

- Analyzed Sensor Data
- Gained Insights into creating Anomaly Detection Models using AWS Tools and Python Libraries

Department of Mathematics, UG 09/2020 - 08/2021
Teaching Assistant

- Development of Comprehensive Learning Materials using Office 365 and LaTeX
- Assistance in Exam Invigilation and Grading
- Leading tailored Tutorial Sessions to address Students' Unique Needs in understanding Mathematical Concepts

West Africa Secondary School Certificate Examination (WASSCE) and International General Certificate of Secondary Education (IGCSE), Ghana 03/2020 - 08/2020
Part-time Mathematics Tutor

- One-on-one tuition for test-takers
- Achieved a 100% success rate where students had failed a couple of times in the past
- Utilized Montessori-based tutoring to simplify Calculus I for students

Ernst and Young, Ghana 07/2019
Assurance Intern

- Organized 300 plus physical and digital files to facilitate faster referrals and reduce retrieval time by more than 80%
- Aided a company delegation for client audit
- Used Excel for Data Manipulation and Review to generate Results for large Data Entries
- Learned E&Y's customized Auditing Packages

Ministry of Finance and Economic Planning, MoF Ghana 06/2018 – 07/2018
Tax Policy Intern

- Served on the Organizing Board for the 2018 Africa Initiative Tax Conference with the OECD
- Documented Reports and Tax Exemption Procedures
- Performed Administrative Duties with Efficiency, leading to high Employer Satisfaction and a Second-Term Contract Offer