Michael Asabere, Ph.D.

CONTACT INFORMATION	2 Andover Road Athens, OH 45701 USA	740-249-7461 mdasabee@gmail.com

EDUCATION

Ohio University, Athens, OH

Doctor of Philosophy Degree in Mathematics — Graduation date: May, 2024

- Dissertation Topic: *Evolving the architecture of a hybrid neural network with QR decomposition.*
- Advisor: Professor Martin Mohlenkamp
- Relevant Coursework: Artificial Intelligence, Linear Models, Numerical Approximation Theory.

Ohio University, Athens, OH

Master of Science in Mathematics — Graduation date: May, 2020

- Advisor: Professor Wei Lin
- Relevant Coursework: Optimization and Algorithm Design, Mathematical Statistics, Stochastic Calculus in Finance.

Kwame Nkrumah University Of Science And Technology, Ghana

Bachelor of Science in Mathematics — Graduation date: June, 2017

- Bachelors Thesis: *Optimal Allocation Of The University Shuttle Terminals Using Genetic Algorithm*
- Advisor: Professor Peter Amoako-Yirenkyi
- Relevant Coursework: Matrix Algebra, Physics.

ACADEMIC AND PROFESSIONAL EXPERIENCE

Ohio University, Athens, OH USA
Teaching Assistant — August 2018 - May 2024

Ohio University, Athens, OH USA
Doctoral Researcher — August 2020 - May 2024

Kwame Nkrumah University Of Science And Technology, Ghana
Teaching Assistant — September 2017 - August 2018

Private Tutoring
Tutor — September 2017 - August 2018

Social Security And National Insurance Trust
Data Analyst Intern — June 2015 - August 2015

TAUGHT COURSES

At Ohio University	Dates
MATH 1200: College Algebra	F18, Sp18
MATH 1300: Pre-Calculus	F19, Sp19
MATH 1350: Survey of Calculus	F20, Sp20, F21, Sp21, F22, Sp22, Su22,
MATH 2500: Statistics and Probability	F23

At Kwame Nkrumah University Of Science And Technology	Dates
MATH 365: Differential Equations II	F17
MATH 375: Numerical Methods and Computations II	F17
MATH 168: Differential Equations I	Sp17
MATH 270: Numerical Methods and Computations I	Sp17

RESEARCH INTERESTS	- Machine Learning. - Data Science - Numerical Analysis - Numerical Analysis in High Dimensions - Optimization - Scientific Computing - Ordinary Differential Equations
PAPERS IN PREPARATION FOR SUBMISSION	1. **Michael Asabere** and Martin Mohlenkamp. Evolving the architecture of a hybrid neural network with QR decomposition; **2024**
CONFERENCES WORKSHOPS PARTICIPATION	- Ohio University: Multiple and variety of Talks, Seminars (Ranging from Topics in Machine Learning, Numerical Analysis and Statistical Computing); Aug 2018 – May 2024 - Scientific Computing and Industrial Modeling: Organised by National Institute of Mathematical Sciences (NIMS) Ghana; 27th November to 1st December, 2017: Presented on Optimal Allocation Of The University Shuttle Terminals Using Genetic Algorithm.
PROJECT AND PRESENTATIONS	- Predicted Fall 2022-23 enrollments in (lower-level) MATH courses on Athens campus of Ohio University using Python. Mathematics Department, Ohio University, Athens, OH; Summer, 2022. - Performed Monte Carlo Simulations for computing expected Interest rates and pricing various types of Options (Call, Lookback, Barrier) using Python. Dr. Feng's Research group. Mathematics Department, Ohio University, Athens, OH; Fall, 2020 - Performed frequency analysis on Electroencephalogram data of a patient with Fast Fourier Transform using MATLAB. Dr. Shen's Research group. Mathematics Department, Ohio University, Athens, OH; Spring, 2019
AWARDS RECOGNITION	College of Arts and Sciences, Ohio University: Graduate Tuition Scholarship Recipient, 2018-2024 Awards
DEPARTMENT UNIVERSITY SERVICE	- Student Advising - Overseeing and Mentoring New Teaching Assistants
COMPUTER LITERACY	- Computer programming language proficiency 1. LaTeX 2. MATLAB 3. PYTHON 4. SQL 5. R 6. Git - Courseware 1. Pearson MyLab Math 2. ALEKS Math 3. WileyPlus - Learning Management System 1. Blackboard

SKILLS	• Advanced knowledge of mathematics and statistics.
	• Excellent written and verbal communication skills.
	• Attention to detail and critical thinking.
	• Able to manage multiple projects across various timelines.
	• Productive with both independent and teamwork.
	• Strong interpersonal and leadership skills.
	• Highly self-disciplined, self-motivated and results oriented.
	• Understanding of learners and ability to adapt instruction to diverse learning styles.
	• Demonstrates a caring approach towards students, providing dedicated support and guidance to foster their success.
	• Continuously seeks growth and improvement, embracing suggestions and maintaining a mindset of ongoing development.
PROFESSIONAL ORGANIZATIONS	• Member of the Mathematical Association of America (MAA) • Member of the Society for Industrial and Applied Mathematics (SIAM)
PROFESSIONAL REFERENCES	• Prof. Martin Mohlenkamp, mohlenka@ohio.edu, 740-593-1259
	• Prof. Mark Barsamian, barsamia@ohio.edu, 740-593-1273
	• Prof. Erik Boczko, boczko@ohio.edu, 740-593-1278
	• Prof. Qiliang Wu, wuq@ohio.edu, 740-597-2711
	• Prof. Premjit Singh, psinghms@gmail.com, 908-720-5242