

Instructor: Kate Osei-Poku

Academic Department: Mathematics

University Address: Mathematics Department

East Texas A&M University

PO Box 3011

Commerce, TX 75429-3011

Office Phone: 903-886-5972
University Email Address: Kate.Osei-Poku@etamu.edu

EDUCATION

East Texas A&M University, Commerce

Aug 2024-Dec 2026

Msc. Mathematics (GPA: 4.0)

Kwame Nkrumah University of Science & Technology, Ghana

Bsc. Actuarial Science (GPA: 3.48)

Aug 2018-Sept 2022

PROFESSIONAL EXPERIENCE

East Texas A&M University, Commerce

Aug 2024 - Present

Graduate Teaching Assistant

- Teach college Mathematics to undergraduate student classes while grading assignments, quizzes, exams and maintaining student records.
- Lead Calculus labs with undergraduate students.
- Contribute to the development of effective teaching methods aimed at enhancing student engagement and improving academic performance.

Enterprise Insurance Company, Ghana

Nov 2022-Oct 2023

Actuarial Intern

- Designed a Microsoft Excel template for quick comprehensive motor insurance premium quotes, helping to reduce client waiting time by 50%.
- Educated over a 100 clientele on the benefits of general insurance which helped to clear most misconceptions about the insurance industry in Ghana.
- Utilized Microsoft Excel to track and report on policy renewals within the client database, highlighting retention rates and performance metrics.
- Analyzed the policy renewal behavior within the client portfolio to support client engagement and retention strategies.

EXAMS/CERTIFICATES

SOA Exam FM

June 2025

Certificate of Leadership in Actuarial Science Students Association of Ghana
 June 2021

TECHNICAL STRENGTHS

Microsoft Excel, Microsoft Office, MATLAB, R

PROJECTS, LEADERSHIP & VOLUNTEER EXPERIENCE

A Study on the Vertical and Horizontal Shear Effect on Vector Fields in Images

Aug 2024 - May 2025

- Performed vertical and horizontal shearing on images using Python and conducted experiments with MATLAB to analyze effects on singular points.
- Analyzed the relationship between shear transformations and gradient dynamics.

Survival Analysis of Lung Cancer Patients Undergoing Chemotherapy

Jan 2022-Sept 2022

- Utilized Microsoft Excel in the calculation of Kaplan Meier and Nelson Aalen Estimates of patient data in this study and R to analyze the data received. This provided a graphical representation of the survival and mortality rates required.
- Identified the survival trends among patients proving some effectiveness of chemotherapy over time.

Women's Commissioner, Actuarial Science Students Association of Ghana

Jan 2020-June 2021

- Organized online programs to connect actuarial science students nationwide.
- Coordinated informative sessions with practicing actuaries in the diaspora to educate students in the actuarial career.