

# P.O. Box 25, University of Education, Winneba +233 (0) 558-137370 oseilouis56@ymail.com

#### MPHIL RESEARCH

# "STRUCTURE TO POLYNOMIAL FUNCTORS IN ORTHOGONAL CALCULUS"

My research examined linear polynomial functors and generalized it to the n- polynomial functors as in the algebraic and topological settings. It further looked at the structure of which the functors from the category of inner product spaces to pointed spaces or any space enriched over  $Top_*$  takes.

#### PROFESSIONAL APPOINTMENT

JUNE 2023- DATE

University of Education, Winneba-Ghana *Lecturer* 

JULY 2021- JUNE 2023

University of Education, Winneba-Ghana *Assistant Lecturer* 

SEPTEMBER, 2020 - AUGUST, 2021

Nkoranza North Senior High School.

Head of Mathematics department

SEPTEMBER, 2019 - AUGUST, 2020

Nkoranza North Senior High School.

Exams Officer

SEPTEMBER, 2016 - AUGUST, 2021

Elective and Core Mathematics teacher (Nkoranza North Senior High School).

Subject Teacher

SEPTEMBER, 2015 - AUGUST, 2016

Core Mathematics teacher (Saint Monica's Senior High School) **Subject Teacher** 

#### **EDUCATION**

2020-ONGOING Doctor of Philosophy

Pure Mathematics

Kwame Nkrumah University of Science and Technology

2019 - 2020 Postgraduate Diploma in Education

Mathematics

Catholic University College of Ghana

#### COMPUTER SKILLS

PROGRAMMING LANG. Python, Java, C++, Matlab, Visual BAsic

TDA TOOLS Persistent Homology, mapper algorithm

ML ALGORITHMS Supervised, unsupervised learning

### **COURSES TAUGHT**

PROGRAMMING LANG. Python, Java, Visual BAsic

TOPOLOGY Point-set Topology, Algebraic Topology

ALGEBRA Abstract Algeba, Linear Algebra

STATISTICS Experimental Design

#### **COMMUNICATION SKILLS**

CONFERENCE Oral Presentation at Ghana Science Association

#### **AWARDS**

2023 KaggleX BIPOC Mentorship Grant for Data Scientists Project: Credit card fraud detection using topological data analysis(Mapper algo.) with Machine Learning

#### CONFERENCES AND SEMINARS

Directorate of Research, Innovation and Development (DRID)

Building an Excellent University through Funded Research
and Innovation

July
2022

Faculty of science education retreat and workshop faculty of science education.

August

2022

Proposal writing seminar for senior members of the faculty of science education (all day grantsmanship workshop) **February 2022** 

# **PUBLICATIONS**

Assuah, C. K., **Oseia, L.**, Manteya, G. K. (2022). University Mathematics Major Students' Ratings of Their Lecturers' Preferred Teaching Methods: A Repeated-Measures Design. *British Journal of Education*, 10(15), 37-45.

2022 doi:doi.org/10.37745/bje.2013/vol10n153745

Assuah, C. K., **Osei, L.**, Mantey, G. K. (2022). The Effect of Inquiry-based Learning on Senior High School Students' Achievement in Plane Geometry: Pre-test-Post-test Randomized Experimental Design. *Asian Research Journal of Mathematics*, 18(11), 320-331.

2022 doi:10.9734/arjom/2022/v18i11604

**Osei, L.**, Obeng-Denteh, W., Owusu-Mensah, I., Zigli, D. D. (2021). Structure to polynomial functors in orthogonal

# 2017-2019 Master of Philosophy

GRADE A

Pure Mathematics

Kwame Nkrumah University of Science and Tech.

# 2011 - 2015 Bachelor of Science

Department of Mathematical sciences (Mathematics)

University for Development Studies

calculus I. Science World Journal, 16(3), 369-376.

**Osei, L.**, Obeng-Denteh, W., Owusu-Mensah, I., Zigli, D. D. (2021). Structure to polynomial functors in orthogonal calculus II. *Science World Journal*, *16(3)*, *377-383*.

 $Structure\ to\ polynomial\ functors\ in\ orthogonal\ calculus\ II$ 

Alhassan, E. A., Albert, L., **Louis, O**. (2015). On some Applications of Beta Function in some Statistical Distributions.

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