

Rhydal Esi Eghan

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PMB, Mathematics Department, KNUST, Kumasi

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“when you finally make it, teach others how to make it”

Education

Kwame Nkrumah University of Science and Technology (KNUST)

Math Dept., KNUST

PHD SCIENTIFIC AND INDUSTRIAL MODELING

2018-June 2022

- Got Norwegian Scholarship through the Petroleum Letters

Kwame Nkrumah University of Science and Technology (KNUST), National Institute for Mathematical Science,

Math Dept., KNUST

MPhil SCIENTIFIC AND INDUSTRIAL MODELING

2014-2017

- Got Norwegian Scholarship through the Petroleum Letters,... for the period

Kwame Nkrumah University of Science and Technology (KNUST)

Kumasi

BSC. MATHEMATICS

2010-2014

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Area of Expertise

COMPUTATIONAL FINANCE

- Pricing of Financial Derivatives
- Numerical Functional Analysis: Wavelet Techniques
- Stochastic modelling with applications in finance

Skills

Programming R, Python, JavaScript, LaTeX, Matlab

Web Express with Node.JS, HTML5, PgAdmin4

Languages English

Experience

Math Department, KNUST

Kumasi

LECTURER

01.May2022-date

- Lecturing Mathematics courses
- Supervisor: Undergraduate and Postgraduate Research

Math Department, KNUST

Kumasi

ASSISTANT LECTURER

Nov. 2021 - May2022

- Lecturing Mathematics courses
- Supervisor: Undergraduate and Postgraduate Research

Math Department, KNUST

Kumasi

GRADUATE ASSISTANCE

Jan. 2020 - July. 2021

- Mathematics Tutor
- Assistance in Undergraduate and Postgraduate Student's Research

Association of Ghanaian Women in Mathematics

Ghana

GENERAL SECRETARY

Jan,2022 - Present

- Organisation of Meetings
- Effective records and administrative works

Pre-MEST

WEBDEVELOPMENT PROGRAMMING STUDENT

- Learn general web design and web development

Kumasi

10 weeks, 2021

Publication

Time-Frequency Coherence and Forecast Analysis of Selected Stock Returns in Ghana Using Haar Wavelet *Journal of Advances in Mathematics and Computer Science*

RHYDAL ESI EGHAN, PETER AMOAKO-YIRENKYI, AKOTO YAW OMARI-SASU, NANA KENA FRIMPONG

(2019), 30(5),1-12

On the Study of Dynamical Model of Moods Pertaining to Etching Behavioural Patterns *European Journal of Academic Essays*

OBENG-DENTEH WILLIAM, KYEI JOHN, EGHAN ESI RHYDAL

(2014), 1(7):63-69.

Legendre Wavelet Collocation Method for Pricing European Options Under Jump Diffusion Models

RHYDAL ESI EGHAN, GASTON EDEM AWASHIE, PETER AMOAKO-YIRENKYI, AKOTO YAW OMARI-SASU

under review

Honors & Awards

INTERNATIONAL

23July-05Aug.2023 **SUMMER INSTITUTES BIO-STATISTICS**, Observational Data Analysis

University of Washington, Seattle

23July-05Aug.2022 **SUMMER INSTITUTES BIO-STATISTICS**, Big-Data Analysis

University of Washington, Seattle

DOMESTIC

May 2022 **PhD Scientific Computing and Industrial Modeling**,

Nation Institute for Mathematical Sciences

June 2017 **MPhil Scientific Computing and Industrial Modeling**,

Nation Institute for Mathematical Sciences

July 2014 **Bsc. Mathematics**,

KNUST

Presentation

Heidelberg Laureate Forum Conference

New University, Heidelberg

POSTER PRESENTATION

25-29.Sept.2023

- Pricing of European Options with Legendary Wavelet Technique

Weekly Steam Heroines Talk

Online

GUEST SPEAKER

19th August.2022

- GIRLS FOR TECH AND INNOVATION-AFRICA:Uganda- KAMPALA (How STEAM Education can BOOST our Educational System)

Nims Conference

KNUST, IDL Conference Center

PRESENTER

Nov. 2017

- Correlation Analysis of Selected Ghanaian Stocks with Wavelet Coherence Technique

Seminars & Conferences

INTERNATIONAL

MFO Workshop

PARTICIPANT

- meeting of young researchers in financial mathematics

Oberwolfach-Germany

01-06 Oct.2023

Future of Science Conference

PARTICIPANT

*Africa Institute for Mathematical
Science(AIMS), Rwnada*

July, 2019

Heidelberg Laureate Forum Conference

PRESENTER

- meeting of laureates and young researchers in math and computer science

Heidelberg-Germany

23-29 Sept.2023

ICTP/Workshop on Scientific Use of Machine Learning on Low-Power Devices: Applications and Advanced Topics

PARTICIPANT

Online

17 - 21 April 2023

DOMESTIC

Indaba Ghana Conference

PARTICIPANT

Africa young research in Machine Learning

University of Ghana, Legon

03 Sept-09 Sept. 2023

UNESCO Recommendation On Science And Scientific Researches

PARTICIPANT

Amonizer Conference Center, KNUST

17th Nov. 2022

Organisation for Women in Science for Developing World (OWSD)

PARTICIPANT

KNUST,Ghana

Nov. 2018

Nims Conference on Scientific Computing and Industrial Modeling

PRESENTER

- Correlation Analysis of Selected Ghanaian Stocks with Wavelet Coherence Technique

KNUST, IDL Conference Center

Nov. 2017

Stochastic Optimal Control and Application (SOCA-workshop)

PARTICIPANT

*Africa Institute for Mathematical
Sciences(AIMS)-Ghana*

Aug. 2017

Stochastic Application, Research Training (START-workshop)

PARTICIPANT

*Africa Institute for Mathematical
Sciences(AIMS)-Ghana*

Feb. 2017

Committees

2022 **Member**, E-learning Ghana Conference:Planning Committee

KNUST

2022 **Team Lead**, International Day of Mathematics Celebration

Math.Dept,KNUST

2022 **Secretary**, Visibility Committee

Math.Dept,KNUST

2022 **Member**, Health and Safety Committee

COS-KNUST

2022-2023 **Assistant Seminar Coordinator**, Math Dept. Postgraduate Seminar

Math.Dept,KNUST

Extracurricular Activity

Girls in Mathematical Sciences Program (GMSP)

MENTOR

- Mentoring young talented senior high females student

*African Institute for Mathematical
Sciences-Ghana -Ghana*

April. 2022

References

Rev.Prof William Obeng-Denteh

HEAD OF DEPARTMENT DEPARTMENT OF MATHEMATICS KNUST

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Dr. Peter Amoako-Yirenkyi

SENIOR LECTURER DEPARTMENT OF MATHEMATICS KNUST

+(233)501634391

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