## Ale Seun Joseph

## CONTACT INFORMATION

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Ale Seun Joseph - Google Scholar
https://www.linkedin.com/in/ale-seun
https://github.com/seunale/DiabetesPrediction/blob/main/Diabetes.ipynb

## RESEARCH INTERESTS

Mathematical Modeling, BioMathematics, Epidemiology, Machine Learning, Deep Learning, Numerical.

#### **EDUCATION**

- · Federal University of Technology Minna, Nigeria,
  - M. Tech. in Applied Mathematics (September 2021, GPA 4.50).
    - \* Dissertation Topic: Mathematical Modeling of Transmission Dynamics of HIV/AIDS Control Incorporating Drugs Resistant Compartment.
    - \* Advisor: DR. A. T. Cole, Prof. S. Abdulrahman.
- · Federal University of Technology Minna, Nigeria,
  - B.Tech. in Pure and Applied Mathematics, (October 2016, CGPA 3.99).
    - \* Dissertation Topic: Modeling the Transmission Dynamics of Cholera in Nigeria.
    - \* Advisor: Prof. S. Abdulrahman.

# ACADEMIC POSITIONS

- Lagos School of Programming (LASOP)
  - Data Science Tutor, Department of Data Science (May 2022 present)
- · King's College of Health Technology (KCHT), Nigeria,
  - Mathematics Lecturer, Department of Medical Lab Technology (October 2020 April 2022).
- · Federal University of Technology Minna (FUTM), Nigeria,
  - Research Assistant (Volunteer) (September 2019 April 2022).

# TEACHING EXPERIENCE

#### **LASOP**

- Statistics for Data Science
- Excel
- My SQL
- Python
- Machine Learning
- Deep Learning

#### **FUTM**

- Biomathematics,
- Numericals,
- Optimization,
- Algebra.

#### **KCHT**

- Differential & Integral Calculus 1, 1st Semester 2021.
- Differential & Integral Calculus 2, 2nd Semester 2021.
- Differential Calculus 1, 1st Semester 2021

#### **PUBLICATIONS**

Mathematical Modelling for the Transmission Dynamics Control of HIV and Malaria Co-infection in Nigeria Towards Attaining Millenium Development Goal (2022).

S. Ale \*; R. Ogan; S. A. Akande. Asian Journal of Mathematical Sciences (AJMS)

Mathematical Simulation of HIV/AIDS Transmission Dynamics incorporating drugs resistant compartment (2022).

**S. Ale** \*; A. T. Cole, S. Abdulrahman, J. Ineke; Y. Zakari. The Journal of Information, Education, Science and Technology (JIEST).

Parametric Equation for Capturing Dynamics of Cyber Attack Malware with Mitigation on Computer Network (2017) Falaye Adeyinka A, Etuk Stella Oluyemi, Adama Ndako Victor, Ugwuoke Cosmas Uchenna, Olujimi Ogedengbe, **Seun Ale.** I.J. Mathematical Sciences and Computing.

## Conference proceedings

Quantitative Model for Dynamic Propagation and Countermeasure of Malicious Cyber Attack on the Mobile Wireless Network. (2017)

Adeyinka A. Falaye\*, Etuk Stella Oluyemi, **Ale Seun**, M.B Abdullahi, Ugwuoke Cosmas Uchenna, Femi Awogbemi. Intelligent Systems Conference 2017, 7-8 Sepember 2017 | London, UK.

Dynamics of SCADA System Malware: Impacts on Smart Grid Electricity Networks and Countermeasures. (2016) Adeyinka A. Falaye\*, Oluwafemi Osho, Maxwell I. Emehian, **Ale Seun** InternationalConference on Information and Communication Technology and Its Applications (ICTA 2016).

#### Under review

Analysis of Global Stability of Endemic Equilibrium of HIV/AIDS with Drug Resistant Compartment using Lasalle's Invariant Principle.

S. Ale \*; R. Ogan; S. A. Akande. Asian Journal of Mathematical Sciences (AJMS)

Mathematical Model for the Public Campaign on Typhoid Fever Transmission and Control.

**S.** Ale<sup>1</sup>; S. A. Akande, B. Fadipe, A.T Tiamiyu, Q.O Rauf. The International Journal on Recent Trends in Life Science and Mathematics (IJLSM).

#### Published Books

A Review of Banach Fixed Point Theory and The Convergence of Sequences Jeremiah Osibe, **Ale Seun.** Lambert Academic Publishing LAP (2019)

Computer systems malware's propagation and remedies

Ale Seun, Momoh Victor. Lambert Academic Publishing LAP (2018)

## **Conference Abstracts**

Mathematical Modeling of HIV/AIDS Transmission Dynamics and Control Incorporating Drugs Resistant Compartment.

S. Ale \*; A. T. Cole. International Conference on Contemporary Development in Mathematical Sciences 2021.

## **Unpublished Research**

Transportation Algorithm for Finding the Shortest Distribution Route within Niger State Nigeria 2022 Application of Transportation Model to Profit Optimization: A Case Study of Coca-Cola Depots in Abuja Nigeria 2021.

#### **MENTORING**

Ineke Jacob D. (M. Tech Mathematics) 2022.

Tiamiyu Nurudeen A. (Current B. Tech project Mentee Pure and Applied Mathematics) 2022.

Atoyebi Blessing. (Current B. Tech project Mentee Pure and Applied Mathematics) 2022.

Adebayo Reuben. (Current B. Tech project Mentee Pure and Applied Mathematics)

2022. Opeyemi Ishola (B. Tech Pure and Applied Mathematics) 2021.

Isaac Idibia (B. Tech Industrial Mathematics) 2019. Sebiotimo Busayo (B. Tech Industrial Mathematics) 2017. Momoh Victor (B. Tech Pure and Applied Mathematics) 2017.

**HONOURS AND** 

National Mathematics Competition (2015)

**AWARDS** 

Best Paper Publication in Cyber Security. International Conference on Information and

Tutor of 2 Cohorts at Free Al in Every City organized by Data Science Network of Nigeria.

Communication Technology and Its Applications. (ICTA 2016)

Faculty Dean's Commendation for Academic Performance (2012)

Certificate of Service-National Youth Service Corp (2016)

Excellent Service Award: Vice President of RCF FUTM Chapter-2016

**PROFESSIONAL** 

Data Science Society of Nigeria (ID number DSN/AIPlus/2020/16614). **MEMBERSHIP** 

National Mathematical Society of Nigeria.

Math Tech Think Foundation (Reg No. AD220386).

Black in Al

National Mathematical Society of Nigeria

**COMMUNITY** 

**SERVICE** 

**LEADERSHIP** 

Global Leadership Sumit (2021)

**EXPERIENCE** Young Leaders Summit on Strategic Leadership (2020)

Course Representative (2011-2016).

**TOOLS AND SKILLS** 

Python, Machine Learning, Deep Learning, Natural Language Processing, Maple, SPSS, MATLAB, Power

BI, SQL, Excel.

REFERENCES

Dr. OSHINUBI, K.

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Domaine de la Merci- 38706,

La Tronche France.

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Dr. Cole, A. T. Senior Lecturer,

Department of Mathematics,

 $\textit{Federal University of TechnologyMinna Nigeria.} \quad \textbf{Statistics,}$ 

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