Gideon Adele

718 E 5th Ave Stillwater, OK • (405)-385-2133 • <u>gideon.o.adele@okstate.edu</u> • linkedin.com/in/gideon-adele Website: https://gideon-adele.github.io/old_index.html

EDUCATION

Doctor of Philosophy (Ph.D.) - Computer Science

Jan 2021 – Dec 2026

Oklahoma State University -Stillwater, OK

Bachelor of Technology - Computer Science

Dec 2018

Federal University of Technology, Minna, Nigeria

GPA: 4.62/5.00

Class of Degree: First Class Honors

WORK EXPERIENCE

Graduate Research Assistant

Jan 2023 – present

Advanced Networks & Telecommunications Security Lab

Research methods to counter security attacks in vehicular ad hoc networks using machine learning, trust-based schemes, and statistical methods.

• **Dynamic** *k*-means algorithm [1]: The dynamic k-means algorithm was derived by optimizing the *k*-means algorithm by dynamically determining the optimal number of clusters. This is subsequently used to cluster the nodes in VANETs for Sybil attack detection under varying percentages of attackers and scenarios.

Graduate Teaching Assistant

Jan 2021 – present

Oklahoma State University

- Assisted in teaching Java Programming Language (Spring '21 and '25), Theory of Computation (Fall '21), Operating Systems II (Spring '21), Introduction to Computer Security (Fall '22 and Fall '24), Social Issues in Computing (Spring '23), Organization of Programming Languages (Spring '24 and '25).
- Improve undergrad students' programming skills through lab sessions on Java programming.
- Grade student assignments and exams and communicate feedback to students after grading.
- Held office hours to assist students and help them understand complex topics.

Graduate Research Assistant

May 2022 -Dec 2022

Visual Understanding and Complex Systems Lab (OSU)

• Used deep learning (CNNs) for the classification of large genome data for the diagnosis of the Bovine Respiratory Disease Complex in cattle (OpenCV, TensorFlow, Keras)

Software Engineering Intern

May 2017-Nov 2017

nHub Nigeria

- Developed websites and web applications using PHP, Laravel
- Coached trainee developers on data structures, web design and development.

TECHNICAL SKILLS

- **Programming Languages:** Python (proficient), MATLAB (proficient), PHP (proficient), MySQL (proficient), JavaScript (proficient), Java (proficient), C and C ++.
- Machine Learning and Deep Learning: OpenCV, Python, Keras, Pytorch, Tensorflow, Scikit-Learn, Numpy
- Statistics: SAS, R, MS Excel, SPSS
- Data Visualization: PowerBI and Tableau
- **Bigdata Management:** PySpark
- Web back end: PHP, Laravel, MySQL
- Web front end: HTML, CSS, JavaScript, Bootstrap.
- Tools: Microsoft Office, Anaconda, NetBean, MATLAB, XAMPP, SurveyMonkey, GitHub, Jupyter Notebook, Colab
- Simulation Tools: OMNET++, SUMO, Traffic Control Interface.

PUBLICATIONS

Peer-Reviewed Conference Papers

- [1]. **G. Adele**, A. Paranjothi, and M. S. Khan, "Dynamic K-means Clustering for Sybil Attack Detection in VANETs," IEEE 28th International Symposium on Wireless Personal Multimedia Communications (WPMC), Sofia, Bulgaria, 2025, (Unpublished).
- [2]. G. Adele, A. Borah, A. Paranjothi and M. S. Khan, "A Survey and Comparative Analysis of Methods for Countering Sybil Attacks in VANETs," 2024 IEEE 14th Annual Computing and Communication Workshop and Conference (CCWC), Las Vegas, NV, USA, 2024, pp. 0178-0183, doi:10.1109/CCWC60891.2024.10427979.
- [3]. **G. Adele**, A. Borah, A. Paranjothi, M. S. Khan and V. K. Poulkov, "A Comprehensive Systematic Review of Blockchain-based Intrusion Detection Systems," 2024 IEEE World AI IoT Congress (AIIoT), Seattle, WA, USA, 2024, pp. 605-611, doi: 10.1109/AIIoT61789.2024.10578958.
- [4]. Borah, A., Adele, G. (2024), Paranjothi, A. Intrusion Detection and Prevention for Connected Vehicles. Wiley Encyclopedia of Electrical and Electronics Engineering (2024).

PROJECTS

•	Dynamic k-means for Sybil attack detection in VANETs.	2025
•	Page Rank of 40,000 Wikipedia page articles using the Google PageRank Algorithm.	2022
•	Data Visualization using PowerBI to analyze trends in Life Expectancy in six (countries).	2022
•	Implemented a program that classify large genome data from cattle using CNNs.	2022
•	Comparison Analysis of six machine learning models for Breast Cancer Classification.	2021
•	Framework for a web-based integration of health data silos.	2018

LEADERSHIP AND VOLUNTEERING EXPERIENCE

•	Feedback Provider at the 2024 Undergraduate Research Symposium	April 2024
•	Director of Professional Development – CS Graduate Student Association OSU	2023 - 2024
•	Judge at the 2024 Oklahoma State Science and Engineering Fair	March 2024
•	Reviewer – Elsevier Computer and Electrical Engineering Journal	2023 - present

STUDENT AWARDS AND HONORS

- EducationUSA Opportunity Funds Scholar (Won a grant which assists high-achieving low-income students from Nigeria to apply to grad school in the USA).

 May 2020
- Best Graduating Student, Department of Computer Science, Federal University of Technology, Minna, Nigeria. (Recognition for Academic Excellence). Feb. 2019
- Recipient of the MTN Foundation National Scholarship Award for STEM top students in Nigeria (selectivity was 5%).