Victor Solomon

CONTACT INFORMATION

Atlanta, GA, USA
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RESEARCH INTERESTS

I am broadly interested in machine learning and scientific AI. My current focus is on building robust learning systems for heliophysics, with applications in solar event prediction and streaming data pipelines at DMLab.

EDUCATION

Georgia State University, Atlanta, GA, USA
Ph.D., Computer Science, Aug. 2023 – Aug. 2028 (Expected)
Advisor: Prof. Rafal Angryk

African University of Science and Technology, Abuja, Nigeria
M.Sc., Computer Science, Sep. 2019 – Feb. 2021

Kaduna State University, Kaduna, Nigeria
B.Sc., Computer Science, Jan. 2014 – Feb. 2018

PUBLICATIONS

Victor Solomon, Rafal Angryk, Omkar Rayala, Manya Rampuria, Abdul Afrid, and Junzhi Wen. *Time Series Decomposition Using Wavelet and Fourier Transforms for Enhanced Solar Flare Forecasting.* In *Proceedings of the 38th International FLAIRS Conference (FLAIRS)*, 2025.

EXPERIENCE

Graduate Research Assistant
Georgia State University – DMLab *Aug. 2023 – Present*
- Contributed to the SEP Prediction Pipeline using Apache Kafka for real-time space weather event forecasting.
  Project URL: https://dmlab.cs.gsu.edu/sep-prediction/
- Developed a wavelet and Fourier-based time series decomposition framework for enhanced solar flare forecasting.
  Project URL: github.com/dasjar/Time-Series-Decomposition

Data Analyst
United Bank for Africa *May 2022 – Jul. 2023*
- Built data pipelines for risk modeling and performance tracking using Python SQL and dashboarding tools to support strategic decision-making in financial operations

QA Engineer
Field Technologies and Development Partners *Feb. 2021 – Aug. 2021*
- Designed and implemented automated test scripts using Python and Selenium; developed test cases for REST API validation and UI workflows.

Teaching Assistant
Plateau State University *Apr. 2018 – Apr. 2019*
- Supported instruction and grading for the undergraduate course "Introduction to Algorithms and Data Structures."

Professional Activities	*Presenter:* 38th International FLAIRS Conference, 2025
Honors and Awards	– Martin D. Fraser Travel Award, 2025 – AUST Merit Scholarship (Master's Program), 2019 – World Bank Pan-African Undergraduate Scholarship, 2017
Skills	**Programming:** Python, C/C++, R, Java, SQL **Tools & Frameworks:** PyTorch, Tensor-Flow, Apache Kafka, REST APIs, LaTeX **OS:** Linux, Windows