Chibueze Nnamdi Oguejiofor

PhD. Researcher, Environmental Fluid Dynamics.

Personal website

Github

[im] LinkedIn

oguejiofor.n.chibueze@gmail.com

EXPERIENCE

NATIONAL CENTER FOR ATMOSPHERIC RESEARCH (NCAR) | VISITING SCIENTIST | AUG 2022 | COLORADO, USA.

- → Incoming advanced study (ASP) graduate visitor. (Host: Dr. George Bryan)
- → Research focus: LES of hurricane boundary layer forced with spatial heterogeneity in surface processes.

INDICINA LTD. | DATA ENGINEER | SEPT. 2018 - SEPT. 2019 | LAGOS, NIGERIA.

→ Building and optimizing machine learning models for large fintech dataset.

KPMG LTD. | DATASCIENCE INTERN | FEB. 2018 - AUG. 2018 | LAGOS, NIGERIA.

→ Built and deployed a Churn model web application for prediction of default rate.

CARBON LTD. | DATASCIENCE INTERN | Nov. 2017 - JAN. 2018 | LAGOS, NIGERIA.

RESEARCH INTEREST

Boundary layer meteorology, air-sea interaction & hurricane dynamics, geostatistics and spatio-temporal modelling, numerical weather prediction, large eddy simulation (LES).

PAPERS AND CONFERENCES

PAPERS

- → Chibueze N. Oguejiofor* and Graziano Guiliani, 2020, Local and Non-Local planetary boundary layer (PBL) schemes in WRF model -Impact on the Intensification of Tropical cyclone Idai (preprint thesis).
- → Chibueze N. Oguejiofor* and Babatunde J. Abiodun, 2019, Simulating the influence of sea-surface-temperature (SST) on tropical cyclones over South-West Indian ocean, using the UEMS-WRF regional climate model (preprint arXiv).

CONFERENCES

- → Chibueze, N. Oguejiofor*, D. Richter, and C. Wainwright, 2021: Investigating the dependence of hurricane intensity on varying SST patterns using idealized model simulations. American Geophysical Union (AGU), Fall meeting, New Orleans.
- → Chibueze, N. Oguejiofor*, D. Richter, and C. Wainwright, 2021: Investigating the dependence of hurricane intensity on varying SST patterns using idealized model simulations. Midwest Student Conference on Atmospheric Research (MSCAR), held virtually.

AWARDS AND LEADERSHIP

- → NCAR Fellowship Advanced Study Program (ASP) graduate visitor, 2022.
- → American Meteorological Society (AMS) air-sea interaction committee, 2022 Present.
- → UNESCO/IAEA Study Grant International Centre for Theoretical Physics, 2019.
- → AAPG L. Austin Weeks foundation scholarship grant, 2017.
- → MTN Foundation Scholarship for outstanding academic performance, 2012 2017.

EDUCATION

UNIVERSITY OF NOTRE DAME

Doctorate (PhD) - Civil and Environmental Engineering. Aug 2020 - Present | Indiana, USA.

INTERNATIONAL CENTER FOR THEORETICAL PHYSICS (ICTP)

Postgraduate (Pre-PhD) in Earth Systems Physics. Aug 2020 | Trieste, Italy.

AFRICAN INSTITUTE FOR MATHEMATICAL SCIENCES (AIMS)

Masters (MSc.) in Mathematical Sciences.

June 2019 | Kigali, Rwanda.

UNIVERSITY OF LAGOS

Bachelor's (BSc.) in Geosciences (Geophysics major).
Aug 2017 | Lagos, Nigeria.
CGPA: 4.74 / 5.0
HOD's prize - Overall best graduating student (Highest GPA, Top 1%)

SKILLS

PROGRAMMING

Proficient

Python • FORTRAN • Bash • MATLAB • SQL • R

Experienced:

CDO • NCL/NCO • GRADS • Ferret

Familiar:

MPI (HPC) • Git • Cloud (AWS Certified)

LIBRARIES/FRAMEWORKS

Numpy/Scipy stack • Pandas • Tensorflow/Keras • xarray

CLIMATE MODELS

WRF • NCAR's CM1