

# Chibueze Nnamdi Oguejiofor

PhD. Researcher, Environmental Fluid Dynamics.

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## 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 AREA

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

## PAPERS AND CONFERENCES

### PAPERS

- Chibueze N. Oguejiofor\* and Graziano Guilian, 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.

### GRANTS AND FELOWSHIPS

- 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**.

## 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  
• Matplotlib

### CLIMATE MODELS

WRF • NCAR's CM1

## 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).  
CGPA: 4.74 / 5.0 (Highest GPA, Top 1%).  
Overall best graduating student.  
Aug 2017 | Lagos, Nigeria.