

# CHIBUEZE NNAMDI OGUEJIOFOR

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## EDUCATION

University of Notre Dame (ND), Indiana, United States.

*Doctorate (PhD) in Civil & Environmental Engineering and Earth Sciences .*

**2020 - Present.**

International Centre for Theoretical Physics (ICTP), Italy.

*Pre-PhD Diploma in Earth System Physics.*

*Thesis: Local and Non-Local planetary boundary layer (PBL) schemes in WRF model - Impact on the Intensification of Tropical cyclone Idai (2019).*

**2019 - 2020.**

The African Institute for Mathematical sciences, Rwanda.

*Masters (MSc.) in Mathematical sciences.*

*Thesis: Simulating the influence of sea-surface-temperature (SST) on tropical cyclones over South-West Indian ocean, using the WRF climate model.*

**2018 - 2019.**

The University of Lagos, Nigeria.

*Bachelors (BSc. Honours) in Geophysics.*

**GPA: 4.74/5.00 (Highest GPA - Overall best graduating student).**

**2012 - 2017.**

## RESEARCH

Air-Sea interaction, hurricane dynamics, geostatistics & spatio-temporal modelling.

## TECHNICAL SKILLS

**Programming :** Python, Fortran, R, Bash scripting, Matlab, SQL, MPI, AWS.

**Libraries :** Numpy/Scipy stack, Pandas, Tensorflow/Keras, xarray, CDO, Ferret, GrADS, NCO/NCL.

**Climate Models :** WRF, CM1.

## PUBLICATIONS

† 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:1906.08298v1.

† Local and Non-Local planetary boundary layer (PBL) schemes in WRF model - Impact on the Intensification of Tropical cyclone Idai (2019).

## 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.

## WORK EXPERIENCE

Visiting Scientist (NCAR)

**Aug 2022**

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

**Remote Data Engineer (Indicina.)** **Sep 2018 - Sep 2019.**

Building and optimizing machine learning models for large scale datasets. Feature engineering and database management.

**Datascientist (KPMG.)** **Feb - Aug 2018.**

Built and deployed a Churn model for Bank-X as a web application and suggest the Next-Best-Offer to be used for prevention of customer churn.

**Datascience intern (One Finance ltd.)** **Nov 2017 - Jan 2018.**

Text mining and NLP for feature engineering. Building machine learning models for credit scoring of customers from MixPanel data source.

**AWARDS/  
FELLOWSHIPS**

‡ American Meteorological Society (AMS) Air-Sea Interaction Committee. **2022 -Present.**

‡ National Center for Atmospheric Research (NCAR) Fellowship - Advanced Study Program (ASP) visitor. **2022.**

‡ UNESCO/IAEA Study Grant - International Centre for Theoretical Physics, Italy. **2019.**

‡ Mastercard Foundation scholarship award for Masters in Mathematical sciences. **2018.**

‡ HODs prize Overall Best graduating student, Department of Geosciences. **2018.**

‡ Imperial Barrel Award (IBA) First runner-up for African sub-region. **2017.**

‡ AAPG - L. Austin Weeks foundation scholarship grant. **2017.**

‡ 1st Runner up Data science Nigeria. (Machine learning competition) **2017.**

‡ TOTAL EP Sponsorship to the Nigerian Association of Petroleum Exploration international conference. **2016-2017.**

‡ MTN Foundation Scholarship for outstanding academic performance. **2013-2017.**