

# Habib Mohammed

Data Analyst Intern

Raleigh, NC 27606 | 919-348-7674 | himohamm@ncsu.edu | [linkedin.com/in/mohammed/](https://www.linkedin.com/in/mohammed/) | [github.com/mohammed](https://github.com/mohammed)

## Profile

---

Self-driven doctoral student with a strategic, data-driven mindset and extensive research experience in managing large datasets, mining, and predictive analytics. Seeking internship opportunities as a research scientist or data analyst to apply and further develop these skills.

## Education

---

**North Carolina State University,** *Raleigh, NC.*

PhD Computer Science

**Expected May 2028**

CGPA:4.0/4.0

Advisor: Professor Kemafor Ogan

**African University of Science and Technology (AUST),** *Abuja, NG.*

MSc Computer Science

**December, 2017**

**Ahmadu Bello University,** *Zaria, NG.*

BSc Computer Science

**December, 2012**

## Coursework

---

Software Engineering - Automated Learning and Data Analysis - Database Management Concepts and Systems - Software Security - Real Time Systems.

## Technical Skills

---

- **Languages:** Python, SQL, Git, HTML, CSS.
- **Tools:** Docker, CodeQL, TensorFlow, Scikit-learn, PyTorch.
- **Data Visualization:** Microsoft Excel, Matplotlib.

## Technical Experience

---

**North Carolina State University,** *Dept. of Computer Science, Raleigh, NC.*

**Aug 2023 - Present**

Graduate Research Assistant

- Analyzed and processed 93GB of Ethereum blockchain transaction data to identify patterns suitable for automation and developed data pipelines to improve smart contract efficiency.
- Reviewed over 100 security vulnerabilities in OpenEMR software applications, providing solutions to patch weaknesses and improve software reliability.
- Developed and implemented benchmarking methodologies for smart contracts in decentralized marketplaces, focusing on scalability and security improvements.

**Machine Learning Engineer Intern,** *Interglobal Limited, Abuja, NG*

**Jan 2018 - July 2018**

- Curated and processed large datasets from various sources, using web scraping, APIs, and database queries for machine learning application.
- Implemented regression models, decision trees, and neural networks using TensorFlow and PyTorch to improve prediction accuracy for various business solutions.
- Collaborated with cross-functional teams to explore data distributions, applied feature engineering, and built models, reducing error rates by 15%.

## Honors and Words

---

- NCSU College of Engineering Graduate Student Support Plan, Aug, 2023 - May, 2028.
- African Development Bank Scholarship Award for Master Program, July 2016 – December 2017.

## Course Project Experience

---

### Automated Learning and Data Analysis (Python)

- Developed machine learning models to predict rainfall patterns using a 50-year precipitation dataset, achieving improved accuracy through cross-validation techniques.
- Applied neural networks and regression models, optimizing parameters to minimize mean squared error.

### Software Security

- Conducted security testing for OpenEMR using white box, black box, and fuzz testing techniques.
- Identified vulnerabilities, assessed risks, and developed mitigation strategies, improving software security protocols.

## Teaching Experience

---

**North Carolina State University**, *Dept. of Computer Science, Raleigh, NC.*

**Jan 2024 - Dec 2024**

Teaching Assistant - Software Development Fundamentals

- Organized and graded programming assignments and tests for about 36 students.
- Counseled students on course concepts and best practice for programming and debugging.

**North Carolina State University**, *Dept. of Computer Science, Raleigh, NC.*

**Aug 2023 - Dec 2023**

Teaching Assistant – Discrete Mathematics for Computer Scientists

- Constructed rubrics for efficient grading of test questions for over 170 students.
- Tutored students in weekly office hours and exam review sessions.

## Online Courses & Certifications

---

- ALX-T Data Analyst Nanodegree (2022) - [UDACITY](#)
- INASP Author Research Writing Course for Sciences (2021) - [INASP](#)
- Skoltech Summer School of Machine Learning (2022) - [Skoltech](#)
- Big Data Developer Mastery Award IBM Middle East and Africa (2017) - [Google, Coursera](#)

## Publications

---

- **Taming Smart Contracts With Blockchain Transaction Primitives: A Possibility?** (2024). Authors: Sogol-sadat Mansouri, Habib Mohammed, Kemafor Anyanwu. In: 2024 IEEE International Conference on Blockchain <https://doi.org/10.1109/Blockchain62396.2024.00085>.
- **A Recommender System for the Nigerian Fashion Industry Based on Big Data** (2022). Authors: Habib Mohammed et al. In: , AFIT 1st Faculty of Science International Conference , pp. 78-84.
- **Deep Learning Methods for Filter Extraction in Tomato fruits** (2019). Authors: F. I. Lawan, L. E. Ismaila, S. A. Adeshina, H. I. Mohammed and L. Csato. 15th International Conference on Electronics, Computer and Computation (ICECCO).DOI: 10.1109/ICECCO48375.2019.9043283
- **An Intelligent Predictive Model for Electricity Consumption in Institutional Buildings Using Artificial Neural Networks** (2019). In: International Journal of Computer Science and Technology, IJCST Vol. 10, Issue 3.