

# UCHE OKONKWO

[[Email](#)] | [[Website](#)] | [[Github](#)] | [[LinkedIn](#)]

## SUMMARY

Experienced full-stack Data Scientist with a demonstrated history in data optimization, AI/ML model development, and applying economic insights to deliver business value. Proven ability to build scalable solutions and collaborate across teams, with strong communication skills and a focus on continuous improvement in accuracy and impact.

## EDUCATION

**University of Louisville**, Louisville, Kentucky August 2024  
Master of Science, Business Analytics  
**Coursework:** Neural Networks; Natural Language Processing; Info Search & Web Retrieval; Cloud Computing

**University of Virginia**, Charlottesville, Virginia August 2023  
PhD Coursework in Economics  
**Coursework:** Math Economics; Econometric Theory; Macroeconomic Theory; Microeconomic Theory & Game Theory

**University of Nigeria**, Nigeria July 2018  
Bachelor of Science (Honours), Economics  
**Coursework:** Financial Economics; Economic Theory; Cost-Benefit Analysis; Public Choice; Law and Economics

## CERTIFICATIONS

**Introduction to Graph Neural Networks – NVIDIA** (September 2024)  
**Generative AI with Diffusion Models – NVIDIA** (In Progress, Expected [September 2024])  
**Building RAG Agents with LLMs – NVIDIA** (In Progress, Expected [September 2024])

## TECHNICAL SKILLS

**Tools and Frameworks:** C++; Matlab; Python (PyTorch; TensorFlow; Keras; Spacy; Scikit-learn; NumPy; PySpark; JAX); SQL; NoSQL; Hive (via Azure Databricks); Agile (via Jira); Version control (Git/GitLab); Kafka; MXNet; R; Scala; Julia; Hadoop; Pega; Java

**Stat Techniques:** Machine Learning (Linear Regression; XGboost; Decision Trees; Random Forest; Clustering); Deep Learning (CNN; ResNet; Transformers); Generative AI (Large Language Models)

**Data Visualization/Engineering:** Tableau; Power BI; SAS

**Operating Systems:** Linux; Unix; Windows Server

**Quantitative Background:** Stochastic calculus; stochastic modelling; Monte Carlo methods; optimization; financial modelling; algorithmic trading; risk management; computational statistics; advanced statistical (including A/B testing) and computational techniques

**Cloud Technologies – AWS** (S3; EC2; Lambda); **Azure** (Azure Data Factory; Azure Synaptics); CI/CD pipelines

## PROFESSIONAL EXPERIENCE

**Business Systems Analyst - FinOps | PPL Corporation**, Louisville, Kentucky December 2023 – Present

- Led the management of Oracle Critical Patch Updates (CPUs) and quarterly security patches, addressing security vulnerabilities as the SysAdmin. Coordinated with cross-functional teams to ensure secure, compliant deployments across Linux, Unix, and Windows Server environments. Achieved 100% compliance with security protocols while maintaining system stability post-patch.
- Assisting in full system implementation life-cycles for vendor software and project controls applications, including analysis, design, build, testing, and support, with a focus on Supply Chain solutions and renewals. Ensured adherence to information security protocols during system deployment, improving project timelines by 20%.
- Addressed gaps in product development requirements by creating detailed functional and non-functional documentation for each User Story, including workflows, screenshots, and supporting materials, which improved communication and reduced rework requests by 15%.
- Developed and maintained process documentation and provided guidance for complex scenarios, while clarifying software usage, business terms, and processes for development and QA teams, reducing support requests by 25% and improving project alignment.

**Advisory Services Graduate Rotational Program - Quantitative Solutions & Technology | PwC**, Lagos, NG April 2021 – July 2022

- Performed risk assessments and contributed to fraud detection strategies during financial and commercial due diligence for M&A transactions, identifying key risks and opportunities that supported the successful closing of 90% of deals and enhanced transaction value by up to 25%.
- Assisted in building, documenting, and analyzing financial models using Python, VBA, and Excel. Presented detailed model development and validation outcomes to senior leadership, which improved decision-making and contributed to a 95% success rate in delivering advisory services.
- Supported the development of client materials such as feasibility studies and market entry strategies, aiding clients in new ventures and market expansions, while driving revenue growth by 15%.

**Market Research Intern | Institute of Social and Economic Research**, Remote October 2020 – March 2021

- Analyzed large datasets using Python to identify arbitrage opportunities and market inefficiencies, while collaborating with senior traders to fine-tune quantitative strategies for real-time market conditions.
- Utilized advanced statistical tools such as MATLAB and R to analyze data for long-term research projects, ensuring the robustness and reliability of the research findings.

## FELLOWSHIP/PROGRAM

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***Software Engineering Fellow*** | ***Headstarter.co, Remote***

August 2024 – Present

- Engaged in an intensive 14-week software engineering fellowship focused on best practices in coding, debugging, and testing.
- Collaborating with a team on full-stack development projects, deploying websites using React, Next.js, Auth, and MUI.
- Actively learning and integrating advanced technologies such as OpenAI, RAG models, LLMs, and vector databases into real-world applications.
- Participating in teamwork engagements that simulate real-world software engineering environments, fostering strong collaboration and communication skills.
- Continuously enhancing technical skills through workshops, code reviews, and pair programming sessions, with a focus on improving software quality and development efficiency.
- Developing expertise in agile methodologies, version control with Git, CI/CD pipeline automation, and Docker for containerized application management.