

EMMANUEL T. KATCHY

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Abuja, NG 900108

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Credly Profile: [Emmanuel Katchy](#)

Passionate Software Engineer with over 5 years of experience in blockchain, automation, machine learning, and full-stack web development. Adept at transforming complex challenges into robust, user-centric applications. Firm believer in *Linus' Law*: "Given enough eyeballs, all bugs are shallow," reflecting my commitment to thorough and collaborative development. Eager to bring a diverse technical toolkit, strong problem-solving skills, and a dedication to impactful development to a forward-thinking team.

EXPERIENCE

Senior Software Engineer – BigCommand LLC

<https://bigcommand.com>

Delaware, US (Remote)

Sep. 2023 – Oct. 2024

- Led the complete software development lifecycle, from architectural planning to the implementation of robust, scalable features.
- Provided expert technical guidance and mentorship to junior team members on intricate problem-solving.
- Collaborated seamlessly with product, design, and other teams to define project scopes and deliver exceptional software products.

Software Engineer – BigCommand LLC

<https://bigcommand.com>

Delaware, US (Remote)

Aug. 2022 – Sep. 2023

- Developed and maintained scalable software applications, including email marketing automation and a file-sharing service. Focused on architecting and implementing complex projects and protocols.
- Implemented new functionalities and integrated third-party services to expand platform capabilities.
- Participated actively in code reviews, contributing to improved code quality and adherence to best practices.

Software Developer (Contractor)

Abuja, NG (Remote)

Feb. 2020 – Sept. 2022

- Independently designed, developed, and deployed custom websites, scripts, and tools tailored to diverse client needs.
- Utilized various programming languages and frameworks to deliver efficient and scalable solutions.
- Collaborated directly with clients to understand requirements and translate them into technical specifications.
- Managed project timelines, budgets, and quality assurance to ensure timely and successful project delivery.

Campus Ambassador (Volunteer) – Cowrywise

<https://cowrywise.com/ambassadors>

Abuja, NG

May 2024 – Present

- Promote financial literacy and product awareness among university students, expanding reach within the academic community.

Community Lead (Volunteer) – Carry1st

[Community Events Portfolio](#) | <https://www.carry1st.com/community>

Abuja, NG

Sep 2023 – Present

- Foster community engagement and supported initiatives, contributing to the growth of a vibrant user-base.
- Organized and led various community events, demonstrating strong project coordination and communication skills.

PROJECTS

Bridge CMS & MTA (Jan 2025)

Bridge CMS is a multi-channel marketing automation SaaS (covering LinkedIn, email, VoIP telephony)

<https://github.com/bridgeEntity/>

- As the lead technical decision maker and developer, I am responsible for architecting systems and solutions, and making trade-off decisions. Engineered automation workflows, sequence actions, service integrations, rate limits, and spam checkers, ensuring robust server-side logic and system reliability.
- Technologies: Django, PostgreSQL, React, React Query, Redis, Celery, KumoMTA

Blitz of the Hidden Soldiers (BoTHS) (Feb 2024)

BoTHS is a Web3 adaptation of the chess variant, Dark Chess.

<https://github.com/TobeTek/blitz-of-the-hidden-soldiers-fe/>

- A grant recipient of the Toposware Builder Program.
- Leveraged zero-knowledge proofs built with Circom and Prover Solidity Smart Contracts.
- Technologies: Solidity, Hardhat, Circom, Zero-Knowledge Proofs (zkPs).

Battleships DApp (June 2023)

Authored a comprehensive technical article and guide on developing a Battleship game using zero-knowledge concepts on Ethereum.

<https://docs.chainstack.com/docs/develop-a-battleship-game-using-zero-knowledge-concepts-on-ethereum>

GDrive Chronos (June 2023)

A GitHub Action to monitor Google Drive folders for changes or modifications and trigger a GitHub Action workflow.

<https://github.com/TobeTek/gdrive-chronos>

Servus (Aug 2022)

A Python wrapper for the aiohttp library for making asynchronous web requests.

<https://github.com/TobeTek/servus>

- Set up CI/CD for package publishing and distribution with PyPI.
- Set up GitHub Actions test suite and workflows to test different OS environments.
- Technologies: PyTest, Tox, GitHub Actions, Twine

BigFastAPI (Jan 2022)

A FastAPI extension module with pre-built endpoints and logic for common backend functionality

<https://github.com/rijentech/bigfastapi>

Equity Screener and Algorithmic Trader (October 2020)

A NASDAQ trading model using resampled tick data to predict market movements and execute trades.

<https://quantconnect.com/u/emmanuel-k>

OPENSOURCE & VOLUNTEERING

Djangonaut Space (Djangonaut & Session Organizer)

<https://djangonaut.space>

- Updated "Dive Into Python" links (<https://github.com/django/django/pull/17756>).
- Fixed #1688 – Output translatable labels when displaying permissions (<https://github.com/django/django/pull/17934>).
- Implemented Refs #34976 – Print directory structure after startapp and startproject (<https://github.com/django/django/pull/17838>).

KaggleX (Mentee & Associate Mentor)

- <https://www.kaggle.com/kagglex>
- Contributed to the Learning Path Index (<https://github.com/neomatrix369/learning-path-index/>).
- Developed an EDA for the RSNA Abdominal Injury Competition 2023, including a chatbot for recommending next health steps. (<https://github.com/TobeTek/deploy-gradio-ml-on-gcp>).
- Performed Rocket League Game Analysis with ML (<https://www.kaggle.com/code/tobetek/tps-oct-22-eda-tensorflow-and-a-bit-of>).

zku.ONE University

- <https://zku.gnomio.com>
- Wrote additional test-cases and features for Tornado Cash as a practical exercise.
- Gained expertise in conducting "Powers of Tau" ceremonies and setting up zkSNARKs and zkSTARKS for privacy-preserving DApps.

Interchain Developer Bootcamp

- <https://academy.interchain.io>
- Mastered the Ignite and Cosmos SDKs.
- Built the core of an on-chain tollway implementation with Cosmos and Ignite, interoperable with the Cosmos Ecosystem.

GameUp Africa | Maliyo Game Developer Bootcamp

- <https://gameupafrika.com>
- Collaborated in teams and built games with Unity3D for mobile and desktop.
- Built and published [Into The Void](#), a 2D Space shooter for mobile.
- Built [Running Pingu](#), an endless 3D runner for mobile.

EDUCATION

B.Eng, Mechanical Engineering

March 2021 – Nov. 2026

University of Abuja, Nigeria

- Achieved an exceptional 99.94 percentile score (340/400 agg.) on the UTME JAMB exam.
- Awarded the NNPC/SEPLAT National Scholarship following a rigorous selection process.

Applied Data Science II: Machine Learning & Statistical Analysis (with honors)

March 2022

WorldQuant University

Applied Data Science I: Scientific Computing & Python (with honors)

Dec. 2021

WorldQuant University

West African Senior School Certificate Examination (WASSCE)

Aug. 2020

Lordswill Academy

CERTIFICATIONS

Cyber Threat Management - Cisco

May 2023

Cybersecurity, Endpoint Security, Network Defense, Cryptography, Cloud Security.

Deep Learning Specialization - Coursera

March 2023

Neural Networks, TensorFlow, Keras, Sequence Models, Natural Language Processing, Computer Vision, Machine Learning.

Interchain Developer Academy - B9Lab

Dec. 2022

Cosmos SDK, Go.

Game Development and Design - Maliyo Games

Dec. 2021

C#, Unity3D, Game Development, Game Design, Mobile Applications, Project Management, Quality Assurance.

Python/Django Developer - HNG Internship | Zuri NG

Dec. 2021

Python, Django, REST APIs, Databases, SQL, Product Management.

REFERENCES

Mani Sarkar

Mentor and Co-advisor, KaggleX | <https://www.linkedin.com/in/mani-sarkar/>

Nnaemeka Ngwu

Co-founder & CEO, BigCommand LLC | nnaemeka@bigcommand.com