John Agyapong Boamah

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StackOverflow: https://stackoverflow.com/users/15483024/joboa

EDUCATION

Master of Applied Science in Mechanical Engineering

2022 - Present

University of Windsor, ON | Average: 85.5

Bachelor of Science in Mechanical Engineering

2015 - 2019

Kwame Nkrumah University of Science and Technology, Ghana | Cumulative Average: 72.67

SUMMARY

Highly motivated software developer with experience in full-stack development and AI programming. Skilled in building reusable UIs with React and developing REST APIs using Python/Django, Java/Spring Boot, and Ruby on Rails. Proficient in data analysis with NumPy, Pandas, and Matplotlib, as well as deep learning with PyTorch. Demonstrated ability to integrate third-party APIs and develop responsive web applications using Tailwind CSS and Material UI. Completed a smart contract development workshop with proficiency in Solidity and TypeScript programming languages.

WORK EXPERIENCE

Smart Contract Developer

Jun. 2022 – Jul. 2022

Encode Club (Solidity Workshop)

- Gained proficiency in the TypeScript and Solidity programming languages.
- Designed and developed a smart contract using Ethereum blockchain technology to create a decentralized application (dApp).
- Integrated the smart contract API with the front-end using web3.js and React, enabling the dApp to interact with the Ethereum blockchain.
- Employed various testing tools like Remix IDE and Truffle Suite to test the smart contract and ensure its functionality.

Full-stack Developer Altdeck.io (Contract)

Mar. 2022 – Jun. 2022

- Collaborated with a team of developers to build a full-stack e-commerce platform from scratch, using React, Ruby on Rails, and Python/Flask.
- Designed and developed a responsive UI for the platform using Tailwind CSS and Material UI, ensuring a seamless user experience across devices.
- Implemented various features, including a product catalog, shopping cart, and checkout process, using RESTful APIs built with Ruby on Rails and Python/Flask.
- Integrated third-party APIs, such as Google ReCAPTCHA, for added security and functionality.
- Conducted extensive testing and debugging to ensure the platform was error-free and performing optimally.

REST API Developer

Aug. 2021 - Sep. 2021

Turntabl, Ghana (Mentorship program)

- Worked with Java Programming and Spring Boot Framework to design, develop and test REST APIs for various use cases.
- Utilized data structures such as Arrays and Collections to optimize API performance.

- Integrated Swagger for API documentation and testing purposes.
- Employed various testing tools like Junit and Mockito to ensure API functionality and data accuracy.
- Followed Agile methodology to deliver APIs on-time and within budget.

Al Programmer

Aug. 2021 – Dec. 2021

Udacity Nanodegree Program

- Developed a strong understanding of artificial intelligence concepts and techniques, including linear algebra, calculus, and neural networks.
- Utilized Python libraries such as NumPy, Pandas, Matplotlib, and PyTorch to implement various machine learning models and algorithms.
- Designed and developed an algorithm to classify dog breeds using a pre-trained image classifier, achieving an accuracy of 85%

Full-stack Developer

Jun. 2019 – Jul. 2019

Aces Code Hub (Bootcamp), Ghana

- Collaborated with a team to build a fully functional web application that allows users to search for and purchase items from an online store.
- Designed and developed an intuitive user interface using React, HTML, and CSS.
- Implemented a RESTful API using Python/Django and Django REST Framework to handle user authentication, product search, and ordering.
- Deployed the application to Heroku and ensured that it was fully functional and responsive on various devices.
- Utilized Git for version control and collaborated with team members using Agile methodologies to ensure efficient project delivery.

SKILLS

- Proficient in various programming languages, including Java, Python, Ruby, and Solidity.
- Strong experience with various web development frameworks, including React, Ruby on Rails, and Spring Boot.
- Strong understanding of software engineering principles, including Agile development, testing, and debugging.
- Experience with cloud-based services like Heroku and Amazon Web Services (AWS).
- Experience with various databases, including MySQL, PostgreSQL, and MongoDB.

OPEN-SOURCE CONTRIBUTION

As a contributor to the open-source framework IVY, I implemented complex number functions using NumPy. This involved creating new functions that returned the imaginary and complex parts of complex numbers. IVY aims to bring together various machine learning frameworks, including TensorFlow, Jax, and NumPy, under a unified platform. **Contributions (2023):** https://github.com/unifyai/ivy/pull/10461 and https://github.com/unifyai/ivy/pull/10483

CERTIFICATIONS

- Al Programming with Python Nanodegree (Udacity, Issued Dec 2021)
- Crash Course on Python (Coursera, Issued Jun 2021)