Ikenna Ifekaonwu

(912) 541 0818
ifekaonwuikenna@gmail.com
www.ikennaifek.com
https://www.linkedin.com/in/ikenna-ifekaonwu

EDUCATION

Georgia Southern University, Statesboro **Georgia,USA**
M.S Mechanical Engineering (Mechatronics) 2021
Federal University of Technology, Owerri **Imo, Nigeria**
B.S Mechanical Engineering 2014

SKILLS

Programing: *Java, Spring boot, Python, MATLAB, JavaScript, React, Django, React Native, CSS, HTML, Bootstrap, DynamoDB, MySQL, Firebase, AWS, Microsoft Azure*
Software: *Git, Jira, Bitbucket, Ansys Workbench, Solid works, AutoCAD, Autodesk Netfabb, Adobe Illustrator, Photoshop, After Effects.*
Expertise: *Amazon Web Service(AWS), Front-end Development, Java Microservice, Junit Testing, Core Java Programming, Database Application Development, Agile methodologies and Design Pattern, REST APIs, Collaborative Development*

WORK EXPERIENCE

Aipalbot LLC California, USA
Full Stack Developer Jan 2020 – Present (remote)

- Developed REST API using Spring boot and MySQL database
- Conducted the implementation of MVC pattern using React JS and spring controller
- Created API to connect AWS DynamoDB with S3 for large data storage
- Extensive use database programming to store data, functions and triggers using SQL, and MySQL.
- Use Spring boot to develop various Restful APIs that accept and process requests in a readable format such as JSON.
- Created clinician registration form and validation UI using React Hooks
- Collaborated extensively with other team members to develop enterprise applications using Object Oriented Programming and, Scrum and Agile approach.
- Migrates projects to AWS cloud.

Georgia Southern University Statesboro, Georgia, USA
Graduate Research Assistant August 2019 – till date

- Optimized a MATLAB code for quality assurance of additive manufactured structures via video magnification
- Created a Fast Fourier Transformation for analysis of the frequency of 3D printed materials.
- Conducted a spatial decomposition of video signal with a phase-based motion magnification technique and reconstruction of the magnified output.
- Modified initially created web design (Cybertrain) for online learning.

Citrans Telematics Solutions, Lagos, Nigeria
Hardware and Software Specialist October 2015 – July 2019

- Performed system upgrades, software updates, and configuration of telematics devices on RS485 Holykell Fuel level sensors
- Installed the electronic fuel monitoring system for vessels, vehicles, and generators and ensure GPS signals and data are sent to the OEM and end-user
- Performed vehicle diagnostics by connecting devices to the vehicle's onboard diagnostics (OBDII)
- Created an automated vehicle report delivery system to end-user using Excel and Python

- Performed system troubleshooting to determine the root cause and provided corrective action to prevent future failures through investigation and analysis.

PROJECTS

AipalCare *(React, Java, Azure, AWS)*

- Created functional component for patient registration User Interface (UI) using React Hooks and Material UI
- Performed the implementation of the patient profile page in Java, using AWS API Gateway and Microsoft Azure.
- Utilized AWS Lambda and API gateway for application performance

Cybertrain *(Python, Django, html, CSS, JavaScript)*

- Created a REST API using Python, Django Framework with SQL database
- Designed and developed the User Interface using Bootstrap, Html, CSS and JQuery

Vehicle lease application*(Java, Spring Boot, AWS, React)*

- Developed the application using Spring-boot microservices
- Designed the UI using a class based components in React with React-redux
- Created a REST API for the implementation of the application
- Utilized AWS resources such as DynamoDB and S3 for data Storage using Elastic Beanstalk for endpoint creation.

Phase Based Motion Estimation*(MATLAB)*

- Improved on the phase based motion estimation algorithm in MATLAB
- Performed a linear filter to eliminate noise from the image
- Carried out the Fast Fourier Transformation (FFT) to determine the natural frequency of a test object from the video signal.
- Analysed test sample damages using the motion estimation algorithm

Portfolio website*(Java, Spring Boot, MySQL, React)*

- Utilized React's class based component in creating the user interface
- Designed and developed the backend using Spring Boot Microservices
- Secured the application using Spring Boot security and JSON Web Token (JWT)
- Utilized AWS DynamoDB and S3 for data storage, with endpoint creation using Elastic Beanstalk and EC2.
- Deployed the application using AWS Route53