

JEAN-EMMANUEL KOUADIO

DATA SCIENTIST INTERN

Shepherdstown, WV | emmanuelkj5@gmail.com | (681) 283-0298 | [LinkedIn](#) | [Portfolio](#)

EDUCATION

Shepherd University Jan 2022 - Dec 2024
Master of Science in Data Analytics & Information Systems Shepherdstown, WV

Shepherd University Aug 2017 – Dec 2021
Bachelor of Science in Computer Engineering Shepherdstown, WV

WORK EXPERIENCE

Shepherd University Wellness Center Sep 2022 - Present
Flex Manager Shepherdstown, WV

- Oversaw operational efficiency, service quality, and pricing optimization, leading to a 30% increase in member satisfaction.
- Managed and trained a team of three, fostering a collaborative and efficient work environment.

West Virginia INBRE Dec 2018 - Jul 2021
Research Assistant Shepherdstown, WV

- Contributed to advanced cancer research, utilizing data analysis to inform experimental approaches.
- Applied mathematical modeling to quantify therapies impacts on tumor progression with 90% accuracy.
- Presented findings at scientific conferences, demonstrating strong communication skills.

PROJECTS

Facial Emotion Recognition System [\[Link\]](#) (Python, Git)

- Develop an AI system to accurately discern user emotions, enhancing digital marketing and mental health tools.
- Processed a dataset of over 25,000 images, applying data augmentation and preprocessing to boost model efficacy.
- Trained a CNN model and a VGG16 model, employing transfer learning techniques for initial benchmarking.
- The VGG16 model accuracy score was very low (i.e., < 45%) so I fine-tuned the model which improved the model accuracy with a score of about 60%.
- Achieved comparable performance with the CNN model and successfully tested both models on new, unseen images.

Cancer Diagnosis Web Application [\[Link\]](#) (Python, Flask, AWS, Git)

- Developed a machine learning-powered web application enabling physicians to diagnose cancer types with 97% accuracy.
- Analyzed and processed a dataset of 500+ instances and 30 features and built the model using Logistic Regression.
- Engineered a user-friendly interface with Flask, complemented by HTML and CSS for intuitive navigation by healthcare professionals.
- Deployed code with comprehensive unit tests on AWS EC2, enabling real-time analysis and KPI tracking.

Smart Recycle Bin – Waste Management Solution [\[Link\]](#) (Arduino/C++, PHP, Data Visualization)

- Implemented an ESP32 microcontroller-based system for real-time monitoring of waste level using Arduino/C++.
- Developed a PHP script for efficient data processing and storage, demonstrating backend development proficiency.
- Utilized Highcharts for data visualization, effectively translating sensor data into actionable environmental insights.
- Analyzed data to forecast waste capacity, employing data science techniques for ecological efficiency.

SKILLS

Programming Languages: Python, R, SQL, JavaScript, HTML, CSS, PHP, and C++.

Libraries: Pandas, NumPy, Matplotlib, Seaborn, Scikit-learn, TensorFlow, and Keras.

Tools: Tableau, Excel, Jupyter Notebook, Flask, AWS, and Git.

Data Science and Machine Learning: Regression analysis, Classification, Clustering, Data Visualization, CNN, ANN, Object Detection, OpenCV, A/B testing, Inference, and Statistical Analysis.

Soft Skills: Communication, Teamwork, Problem Solving, Critical Thinking, Time Management, Adaptability.