K. JUDE ERNEST PAUL

Machine Learning Engineer

To passionately explore the realms of AI and Machine Learning, I'm on a mission to blend innovation and entrepreneurship in the IT world.
My aim: surpass organizational expectations, ensuring their complete satisfaction

Portfolio- https://morningstartm.github.io/ErnestBekham-portfolio/

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http://www.linkedin.com/in/ernest-beckham | https://huggingface.co/ErnestBeckham

Projects

Individual Projects

- Real-Time Image Segmentation For Self-Driving Car

This is deep learning based project developed to segment images captured by car camera. I applied several deep learning algorithms such are u-net, segnet, attention u-net, deeplabv3. This project helps to self-driving car to understand environment.

Technologies Used: Deep Learning, Python, Tensorflow, Opencv

- Skull Stripping System

This is deep learning based project developed to segment brain image from skull using MRI. This project helps researchers to remove skull from MRI image and separate brain part. I applied several Deep learning algorithms such are U-Net, Attention U-Net, resu-Net.

Technologies Used: Deep Learning, Transfer Learning, Python, Tensorflow,Opencv, Flask, HTML, CSS

- Content Based Book Recommendation System

This is machine learning based project developed to recommend book to user. This system recommend books to user based on book's content.

Technologies Used: Machine Learning, Python, Scikit-Learn, Flask, HTML,CSS

- Movie Review Sentiment Analysis System

This is deep learning based project developed to classify user's comment into negative and positive. I applied deep learning algorithms that is lstm.

Technologies Used: Deep Learning, Python, Tensorflow, Scikit-Learn, Flask, HTML, CSS

- Human's Activity Recognition

This is client based machine learning project to determine the recognition of human's activity using accelerometer and gyroscope. I applied several ml algorithm such are random forest classifier, decision tree classifier and support

Technologies Used:- Machine Learning, Python, Scikit-Learn, Flask API

- Loan Approval System

This is machine learning project developed to predict eligibility of customer to get loan. I applied several ml algorithm such are random forest classifier,decision tree classifier, logistic regression, k-neighbors classifier, gradient boosting classifier, catboosting classifier and adaboost classifier.

Technologies Used:- Machine Learning, Python, Scikit-Learn, Flask API, HTML, CSS

- Brain Tumor Classification System

This is deep learning based project developed to classify tumors using MRI. User can classify tumor using Deep learning model and visualize explanation of XAI(Explainable AI). XAI enable user to trust Deep learning model.

Technologies Used: Deep Learning, Transfer Learning, XAI, Tensorflow, Python, LIME, Opencv, Flask, HTML, CSS

- Lung Cancer Classification

This is deep learning based project developed to classify lung cancer using histopathology images. User can classify cancer using deep learning model. I applied transformer based model such are vision transformer, residual vision transformer, vision transformer with convolutional neural network.

Technologies Used: Deep Learning, Transfer Learning, Vision Transformer, Tensorflow, Python, Opencv.

- AI content Detection using GPT-2

this is deep learing based project. I trained GPT-2, its a Large Language model to detect AI content. I used my batchmates assignemts and report and content that generated by chatGPT, LLMA, mistral and PPLX-70B as dataset. I deploy this model in Huggingface's Space. .

Technologies Used: Transformers, PyTorch, GPT-2, large language model, Streamlit, Pandas

Technical Skills

Python | C++ | GAN | Unity Engine | OOP | Java | Django | Flask | HTML | C | Computer Vision | Machine learning | Deep learning | NLP | CSS | Large language models | Tensorflow | Pytorch

Work Experience

2019 Oct - 2020 May — **Call Support Agent**, Airtel

Education

2020-Present — **Bachelor of Information Technology (BIT)(honors)**, Esoft Metro Campus

2016 - 2018 — **G.C.E Advanced Level Examination**, Al-manar Central College
(E-Tech - S | ICT - S | SFT - C)

2012 - 2014 — **G.C.E Ordinary Level Examination**, Koddaikallar Maha Vidiyalayam

2004 - 2011 — **St.Anthony's Tamil Maha Vidiyalayam**

Extra-Curricular Activities

- Engage in Painting, Sketch, Curving Chalks
- Experienced Chess Player with a Strategic Mindset
- Experienced in Sound engineering at GGC

Languages

English - Professional Working Proficiency
Tamil - Professional Working Proficiency
Sinhala - Professional Working Proficiency

Non-Related Referees

Samuel C. Kanth (ACA, CPA, MAAT, MCPM)
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