Mark Verma

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Education

IIITM Gwalior — Madhya Pradesh, India
Bachelors, Computer Science. SGPA 8.67 — Graduation Date : 2024
Relevant Coursework: **Artificial Intelligence, Statistics, Cloud Computing**

Experience

Banach Technologies — Singapore (Remote)
ML Intern — April 2024 – Present

- Currently working on implementing trading strategies, and **optimizing code** to reduce processing times
- Writing and implementing **ML models** from scratch to work with stock market APIs to make accurate **hedging strategies**.
- Writing **unit test cases** for the different libraries already created for different trading strategies.

Alemeno — Maharashtra (Remote)
Software/ML Intern — July 2023 – Present

- Led robust data preprocessing for **semantic segmentation models** in rural landscapes using raster data
- Spearheaded implementation and optimization of cutting-edge computer vision algorithms (e.g., Douglas Peuker, Jarvis March) on scalable systems
- Proficiently manipulated GIS raster data, led strategic refactoring, and created unit tests for optimized Python applications
- Successfully deployed Django apps on AWS, expert in **cloud infrastructure management** and engineered end-to-end **CI/CD pipelines** for seamless integration and continuous delivery

Bewgle — Bengaluru (Remote)
Data Analyst — May 2022 – July 2022

- Leveraged Python libraries and **NLP techniques** to generate insightful visualizations and predictions on product topics using proprietary Bewgle software datasets. Extracted valuable insights on Amazon products across diverse verticals through comprehensive analysis of product reviews.
- Automated data pre-processing using efficient Bash and Python scripts, streamlining workflows and enhancing overall efficiency. Achieved a **90 percent reduction in dataset redundancy** by optimizing information extraction processes.

Projects

Resume Parser
Pytorch, LLMs, HuggingFace — January 2024

- A **streamlit application** where users can upload their resume and get it parsed into a json file.
- Created using **OOPs concepts** for a modular codebase.
- Used multiple LLMs to handle different parts of the document.

ResearchMate - Community Rooms
Django, Kubernetes — May 2023 – June 2023

- Created a **Discord like interface** where users can create rooms to interact with other
- Wrote test cases and implemented **CI/CD pipelines**
- Implemented signup, signin, messaging, room creation, post creation

Medical Waste Classification App
Tensorflow, Javascript May 2023 – June 2023

- Trained a **deep learning model** to classify different medical waste into one of three categories with an accuracy of 98.4%.
- Created a web app incorporating the model using **Tensorflowjs** for users to upload images to be classified.
- Published paper in IEEE Xplore - **Medical Waste Classification using CNNs**

Miscellaneous

Programming Languages: Python, C++, Bash, Javascript
Libraries and Frameworks: Pytorch, OpenCV, Numpy, Pandas, Rasterio, Matplotlib, Tensorflow, Dash, Django, Flask, Scikit-learn
Tools: Docker, AWS Sagemaker, Kubernetes, MLFlow, Streamlit, Git, Linux
Contributions/Certifications: DevOps on AWS Specialization,**GCP Network Deployment**, Opensource Contributor @PyMC