NITESH KUMAR

Linkedin:https://www.linkedin.com/in/nitesh-kumar-b05051212
Github: https://github.com/Ni30kumr

Email: niteshkumaar87@gmail.com
Mobile: +91-9958438491

EDUCATION

- **Rajiv Gandhi Institute Of Petroleum Technology** — Amethi, U.P
  Bachelor of Technology - Petroleum Engineering; GPA: 7.03 — *Dec 2020-June 2024*
  Skills: *Analysis Of Machine Learning Algorithms, Artificial Intelligence, Machine Learning, Data Science, Databases*

SKILLS SUMMARY

- **Languages**: Python, C
- **Library** : Scikit, NLTK, TensorFlow, Keras, opencv,Transformer, Pytorch
- **Tools**: FastAPI, MySQL, Mongodb, Linux, OpenAI, NLP, Computer vision, Hugging Face, AWS
- **Platforms**: Windows, VS code, Jupyter Notebook, Google collab
- **Soft Skills**: Leadership, Event Management, Writing, Public Speaking, Time Management

EXPERIENCE

- **Healthiclick** — Remote
  Python Developer — *8Jan 2024 - present*
  - **Implemented RVC Deep Learning Model with Google TTS and FastAPI for Voice Cloning**: I used the RVC model for voice cloning, enabling users to translate YouTube videos with or without emotion using Google TTS whisper and RVC. Users could train their own models with their choice of speaker and language for audio cloning in videos. I also used FastAPI to write endpoints for the voice cloning project, allowing users to input their details. Additionally, I deployed all endpoints in an 'EC2' instance of 'AWS' and made it a background service.
  - **FTP pipeline**: Extracted FTP audio, transcribed with OpenAI whisper model, summarized data, and stored in MySQL and extracted using FastAPI endpoint. Ensured seamless integration by connecting to the database through Python code, enhancing data accessibility and processing efficiency.
  - **Web scraping**: Enhanced testing for a language translation ML model by scraping multilingual content using Python and BeautifulSoup.

PROJECTS

- **Celebrity Image classification using SVM,Random Forest and Logistic Regression**:
- Image Processing and Classification: Utilized CV2 library for filtering celebrity images based on eye presence. Employed PyWavelet for feature extraction.
- Model Training and Evaluation: Split dataset for training/testing. Employed SVM, Random Forest, and Logistic Regression models for classification based on extracted features.
- Performance Analysis: Achieved 78% accuracy with SVM model. Visualized model performance using a confusion matrix. **Tech**: Machine Learning, Python, Computer Vision (CV2, PyWavelet), YOLO, OpenCV

- **Tranined a ML model to win 'hangman' game using NLP**:
- Dataset Preprocessing: Generated a list of words with each letter as an element. Created a character-to-index dictionary for word conversion.
- Data Transformation: Utilized one-hot encoding to convert the dataset into 3D format. Applied padding for input-output dimension matching, resulting in a training set of 273000*28*26 dimensions.
- Model Training: Trained LSTM and Transformer models for word generation. Optimized with 'adam' optimizer and 'MSE' loss for LSTM. Integrated word2vec for embeddings and NLP techniques. **Tech**: Machine Learning, Deep Learning, Big Data, Word2Vec, Transformer, NLP.

- **Prediction of porosity using well logs and machine learning and deep learning**:
- Data Cleaning: Preprocessed selected well log from Sweden by removing conflicting rows for data consistency.
- Feature Selection: Reduced dataset dimensionality by removing irrelevant well logs, focusing on relevant features for porosity prediction.
- Transfer Learning: Trained deep learning model on one well log dataset and fine-tuned on three additional datasets. Achieved 0.88 accuracy when tested on a fourth well log. **Tech**: Well Logs, Machine Learning, Data Visualization, Deep Learning, Python, Transfer Learning

HONORS AND AWARDS

- Top 2 percentile in JEE ADVANCE qualified JEE Mains - Oct-2020
- Merit-cum mean scholarship at RGIPT 2020-2024
- Qualified Data Science and Arficial Intelligence exam of GATE 2024
- Got selected for EAGE Mentor-mentee program Dec 2023

VOLUNTEER EXPERIENCE

- **Vice-President at EAGE RGIPT student chapter** — Raebareli, India
  I conducted event related to petroleum , computer science and other branches. — *may2023 - Present*
- **Event management head at SPE RGIPT student chapter** — Rarbareli, India
  Conducted PPO event and organized a interaction session with seniors;. — *jun 2022 - May 2023*
- **Cricket captain of RGIPT cricket Team**