Yash Pal Singh Negi

Phone: 7037191879 | Email: yashnegiuk02@gmail.com | LinkedIn: linkedin.com/in/yashnegi69

Machine Learning Enthusiast | Python Developer | Data-Driven Problem Solver

Skilled in Python, scikit-learn, pandas, NumPy, and data visualization. Passionate about applying data science to solve real-world problems with clean, scalable code.

Projects - Project Link

GDP Growth Prediction using Machine Learning

- Engineered and trained an Gradient Boosting regression model on World Bank macroeconomic data, achieving an R^2 score of **0.96** for accurate GDP growth predictions across 100+ countries.
- Cleaned and transformed **15+ economic indicators**, reducing missing values, detecting and treating outliers, and performing exploratory data analysis and feature engineering.
- Achieved accurate GDP forecasts with model evaluation through actual vs predicted plots, residual analysis, and feature importance visualization.
- Skills: Python, XGBoost, Scikit-learn, Pandas, Numpy, Matplotlib

Handwritten Digit Recognition with MNIST Dataset

- Built and trained a multi-class classification model using **Stochastic Gradient Descent (SGD)** and **deep neural networks** to classify handwritten digits with **accuracy > 98%** on the test set.
- Preprocessed 70,000 grayscale images (28x28) with normalization, reshaping, and dimensionality reduction (PCA) for optimized model performance and faster convergence.
- Leveraged **GridSearchCV** for hyperparameter tuning and used evaluation metrics like **confusion matrix, precision, recall**, and cross-validation to validate and enhance model performance.
- Skills: Python, scikit-learn, TensorFlow, NumPy, matplotlib

Diamond Price Prediction

- Designed Built and evaluated multiple regression models (Linear, Decision Tree, Random Forest, XGBoost) to predict diamond prices using Kaggle dataset, achieving the lowest RMSE of **536.91** and **R^2 (accuracy)** of **0.982** with **XGBoost**.
- Implemented end-to-end ML pipeline including data preprocessing (encoding, scaling), model training, cross-validation, and hyperparameter tuning using GridSearchCV.
- Skills: Python,Pandas, NumPy, scikit-learn, Matplotlib, Seaborn

Yoga Balance - Web Application for Client

- Developed a **responsive web application** utilizing **React.js**, **React Router**, and **CSS** to create a user-friendly interface and improve page load performance.
- Designed and integrated **reusable UI components** (Navbar, Footer, Hero) to ensure a seamless, consistent design across the website and enhance **user experience (UX)**.
- Skills: React.js, React Router, HTML5, CSS3, JavaScript, Responsive Web Design (RWD)

Skills

- **Languages : Python**, C,C++, javascript,MySQL
- **Frameworks :** Django,ReactJS,Langchain,StreamLit
- **ML/NLP :** Pandas,Numpy, Scikit-learn, NLTK,TensorFlow,Deep Learning
- **DevOps & Tools :** Docker, Git, JIRA, CI/CD Pipelines, GitHub
- **Interests :** API,Artificial Intelligence, Machine Learning, Automation, Data Visualization

Education

- **B.Tech** | HNBGU | 2023 | 6.6 CGPA
- **12th** | K.V.S | 2019 | 84%
- **10th** | D.P.S | 2017 | 9.6%

Certification

- **Python basic** certificate provided by hacker rank.
- **SQL Advance** certificate provided by hacker rank.