KAGGLE PROJECTS

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1. Facebook Friend Link Prediction

- **Description:** The data consists of source nodes and destination nodes of friends. After feature engineering, I applied various machine learning models such as Random Forest and XGBoost.
- Implementation: Social Media, Advertising.
- Skills: Machine Learning, Sklearn, Python.
- **GitHub:** Facebook Friend Recommendation
- Source: Facebook Recruiting on Kaggle

2. Human Activity Recognition with Smartphones

- **Description:** Addressing a classic Time Series Problem, I utilized LSTM to analyze time series data of different activities recorded by smartphones, fitness bands, and smartwatches.
- Implementation: Mobile Application, Fitness Bands, Smart Watches.
- **GitHub:** <u>Human Activity Detection using Deep Learning (RNN-LSTMs)</u>
- Source: <u>Human Activity Recognition with Smartphones on Kaggle</u>

3. Amazon Fine Food Reviews

- Description: Tackling a Sentiment Analysis problem, I classified the polarity of Amazon reviews using various models including k-NN, Logistic Regression, Naïve Bayes, Ensemble models, Decision Trees, and LSTM.
- Implementation: E-commerce Applications, Browser Extension.
- **Skills:** Data Visualization, Machine Learning, Python.
- GitHub: Amazon Fine Food Reviews
- Source: Amazon Fine Food Reviews on Kaggle

4. Stack Overflow Tag Prediction

- Description: Solving a multi-class classification problem, I performed feature engineering and applied
 models like Logistic Regression and SVM to predict suitable tags based on the title and body of Stack
 Overflow questions.
- Implementation: Question-Answer Platforms like Quora and Stack Overflow.
- **Skills:** Data Visualization, Machine Learning, Python.
- GitHub: Stack Overflow Tag Prediction
- Source: Stack Overflow Tag Prediction on Kaggle

5. Taxi Demand Prediction in New York City

- **Description:** Predicting taxi demand in New York City using a Kaggle dataset. Employed machine learning techniques to forecast demand patterns and optimize taxi services.
- Implementation: Transportation, Urban Planning.
- **Skills:** Time Series Analysis, Machine Learning, Python.
- GitHub: Taxi Demand Prediction in NYC
- Source: NYC Taxi Demand Prediction on Kaggle

6. Amazon Apparel Recommendation

- **Description:** Developed a recommendation system for Amazon apparel using Kaggle's dataset. Implemented collaborative filtering techniques to enhance user experience in e-commerce platforms.
- Implementation: E-commerce, Recommendation Systems.

- **Skills:** Collaborative Filtering, Recommender Systems, Python.
- **GitHub:** Amazon Apparel Recommendation
- Source: Amazon Apparel Dataset on Kaggle

7. Microsoft Malware Detection

- **Description:** Participated in the Microsoft Malware Detection competition on Kaggle. Employed advanced machine learning models to detect and prevent malware, contributing to cybersecurity efforts.
- Implementation: Cybersecurity, Machine Learning.
- **Skills:** Feature Engineering, Ensemble Learning, Python.
- GitHub: Microsoft Malware Detection
- Source: Microsoft Malware Detection on Kaggle

8. Self-Driving Car - Steering Angle Prediction

- **Description:** Implemented a self-driving car project using Kaggle's dataset. Developed a model to predict steering angles based on input data, contributing to the advancement of autonomous vehicle technology.
- Implementation: Autonomous Vehicles, Deep Learning.
- Skills: Computer Vision, Neural Networks, Python.
- GitHub: Self-Driving Car Steering Angle Prediction
- Source: Car Steering Angle Prediction on Kaggle

9. Quora Question Similarity Prediction

- **Description:** Participated in the Quora Question Pairs competition on Kaggle. Developed a model to predict the similarity between pairs of questions, contributing to the improvement of question answering systems.
- Implementation: Natural Language Processing, Question Answering.
- **Skills:** Text Similarity, Feature Engineering, Python.
- **GitHub:** Quora Question Similarity Prediction
- Source: Quora Question Pairs on Kaggle

10. Netflix Movie Recommendation

- **Description:** Worked on a Netflix Prize dataset to create a recommendation system. Applied collaborative filtering techniques to enhance user satisfaction in movie streaming services.
- Implementation: Recommendation Systems, Entertainment.
- **Skills:** Collaborative Filtering, Data Cleaning, Python.
- GitHub: Netflix Movie Recommendation
- Source: Netflix Prize Data on Kaggle

11. Personal Cancer Diagnosis

- **Description:** Participated in the MSKCC Personalized Medicine competition on Kaggle. Developed models for cancer diagnosis and treatment recommendation based on genetic and clinical data.
- Implementation: Healthcare, Precision Medicine.
- **Skills:** Feature Engineering, Bioinformatics, Python.
- GitHub: Personal Cancer Diagnosis
- Source: MSKCC Redefining Cancer Treatment on Kaggle