1. **Tax Assessment with Remote Sensing**

Employing Remote Sensing for Property Tax Assessment through Building Area Identification.

1. **Biomedical Imaging with CNNs**

Detecting Cardiac Pathologies in MRI Scans with Convolutional Neural Networks (CNN).

1. **LLMs**

Enhancing Image Recognition with Large Language Models.

1. **License Plate Identification**

Advancing Security and Traffic Rule Enforcement through Car Number Plate Identification.

1. **LSTM**

Human Action Recognition via Convolutional Long Short-Term Memory (LSTM) on Kinetics Dataset.

1. **Transformer Models**

Identifying Retinal Damage using Transformer Models.

1. **Predicting Housing Prices with Regression Analysis**

Utilize regression techniques learned in class to create a predictive model for housing prices based on relevant features like square footage, number of bedrooms, and location. Evaluate and refine the model for accuracy.

1. **Customer Segmentation for E-commerce**

Apply clustering algorithms to analyze customer behavior and segment them into groups. This project involves using techniques like K-means clustering to identify patterns and preferences in customer data, aiding in targeted marketing strategies.

1. **Sentiment Analysis on Social Media Data**

Use natural language processing (NLP) techniques to analyze sentiment in social media data. Create a model that classifies posts or comments into positive, negative, or neutral sentiments. Explore the impact of different preprocessing methods and algorithms.

1. **Credit Card Fraud Detection**

Develop a fraud detection model using classification techniques. Use a dataset containing credit card transactions and apply algorithms such as logistic regression or random forests to identify potentially fraudulent transactions.

1. **Movie Recommendation System**

Build a movie recommendation system using collaborative filtering or content-based methods. Utilize a dataset containing user ratings and movie details to create a personalized recommendation engine for users.

1. **Healthcare Data Analysis**

Explore a healthcare dataset to derive insights and trends. Apply descriptive statistics, data cleaning, and visualization techniques. Analyze factors affecting patient outcomes or hospital performance, and present findings for informed decision-making.

1. **Text Summarization using Natural Language Processing**

Implement a text summarization model using NLP techniques such as extractive or abstractive summarization. Apply the model to condense lengthy articles or documents into concise summaries.

1. **Stock Price Prediction with Time Series Analysis:**

Use time series analysis and machine learning techniques to predict stock prices. Explore historical stock data, implement models such as ARIMA or LSTM, and assess the model's ability to forecast future stock prices.