Machine Learning Project Proposal

Group 70

Team Members:

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Project Title:

[TBD]

Objective:

This project aims to develop a machine learning model for image classification using deep learning techniques. The model will analyze and categorize images based on specific features, applying convolutional neural networks (CNNs) or other relevant architectures to achieve accurate predictions.

Scope & Approach:

1. Dataset Selection & Preparation

• Identify and preprocess a relevant dataset for training and testing.

• Implement data augmentation techniques if necessary.

2. Model Development

• Utilize CNNs or an alternative deep learning framework for classification.

• Experiment with pre-trained models and fine-tune hyperparameters.

3. Evaluation & Optimization

• Measure model performance using standard evaluation metrics.

• Implement techniques to enhance accuracy and generalization.

4. Implementation & Deployment

• Develop a simple interface or API for testing the model.

• Explore potential applications and usability improvements.

Timeline:

• Proposal Submission: March 16

• Data Preparation & Preprocessing: [TBD]

• Model Training & Testing: [TBD]

• Final Report & Presentation: [TBD]

Expected Outcome:

This project will provide hands-on experience in applying machine learning to image classification, with a focus on practical implementation and performance optimization.