# COMPARITIVE STUDIES ON FACE RECOGNITION

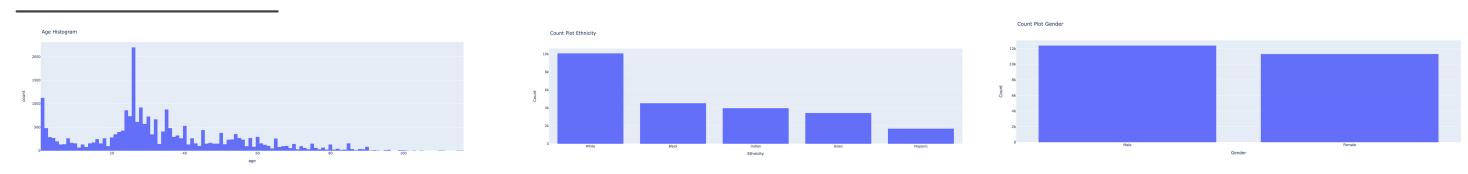
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#### INTRODUCTION

This project is a comparative study of four state of the art models in which we have performed exploratory comparison of images of different Age, Gender and Ethnicity. The models which we have used are Resnet50, VGG19, MobileNetV2 and Alexnet and they models have been compared in terms of classification performance and heatmap generation. This study thus provides explainability to the model predictions in addition to their efficiency in the said classification task.

### DATA DISTRIBUTION



## **METHODOLOGY**

Describe how you've conducted your research. What is the strategy of the team? What methods were used? Were there any special technology applied?

#### Methodology:

- 1. Firstly we have tried to find the available dataset and segregated it in terms of Age, Gender and Ethnicity labels
- 2. Secondly we look at different models that focus on different aspects of the dataset. Models used: Resnet50, VGG19, MobileNetV2 and Alexnet
- 3. Then for comparative study we fine tuned the model on the dataset Age, Gender and Ethnicity classification.

#### Strategy

Comparative analysis and explanatory study on different models with fine-tuning them

## **RESULTS**

