

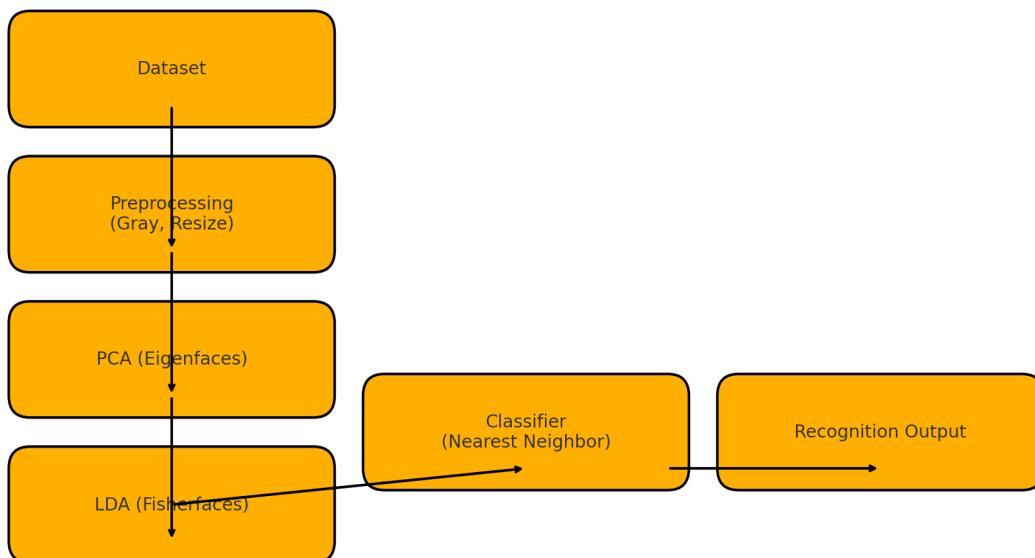
# Hybrid Face Recognition and Image Compression System Using PCA, LDA, DCT, and Huffman Encoding

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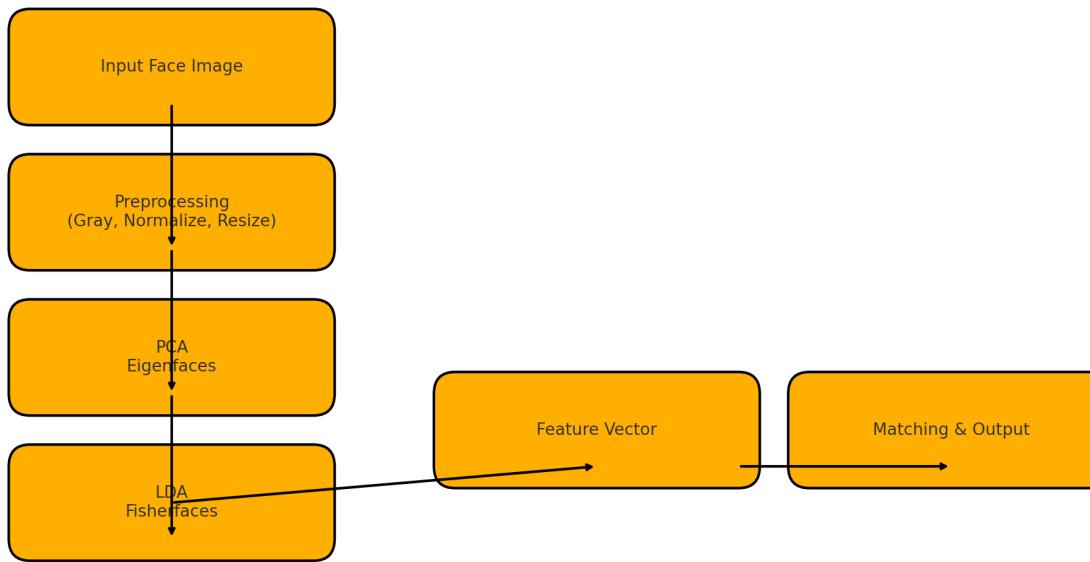
## Abstract

This project presents a hybrid system integrating PCA-based Eigenfaces, LDA-based Fisherfaces, and DCT + Huffman coding for image compression. The system performs efficient face recognition while enabling high-quality compressed image generation.

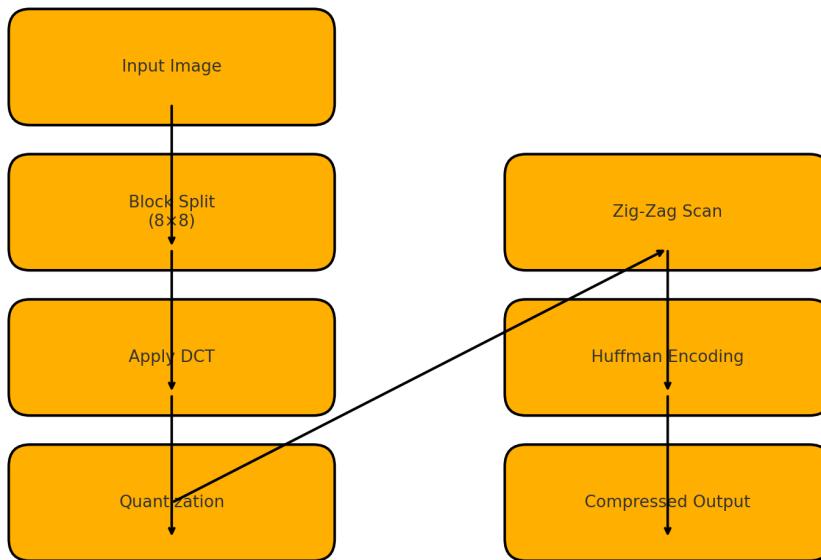
## System Architecture Diagram



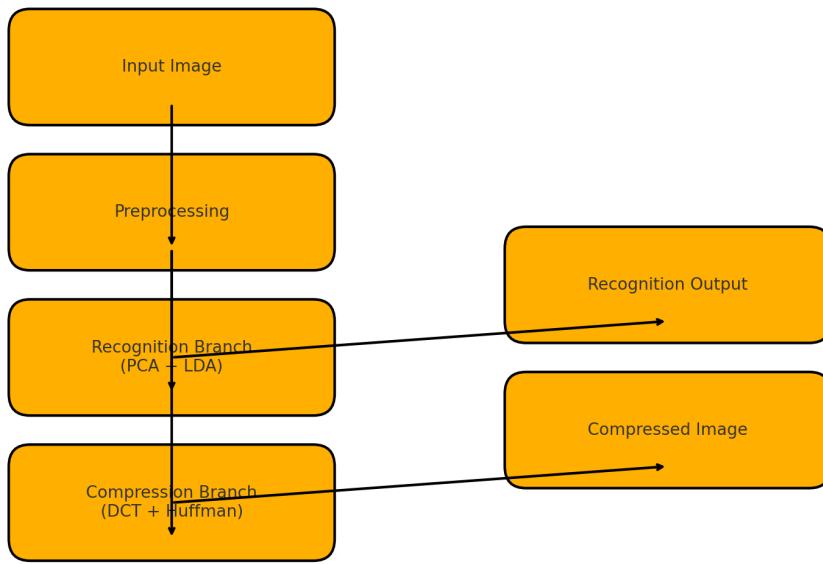
## Face Recognition Pipeline



## Compression Pipeline



## Combined System Flow



**Module Interaction Diagram**

