

**Title:** Real-Time Mobile Face Recognition Application utilizing Viola-Jones and Fisherface Algorithms

**Authors:** Mark Anthony Masiga, Krystille Joy Vete, Jayson Ordonia

## **ABSTRACT**

The application of face detection and recognition on mobile devices introduce many new challenges to the task. In this project, the researchers want to use video as an input in mobile face recognition using a real time video feed. It was done by utilizing Viola-Jones algorithm from static input to dynamic input and creating a class that contains pre-processing and the use of Fisherface algorithm using the java wrapper. Fisherface algorithm is much more accurate if the image to be saved in the storage is more than 30 images per person. This is the algorithm used because it is the easiest and it can recognize faces accurately out from the different images in the storage. After the different testing conducted, it shows that face recognition program using video as an input returned good results with a few discrepancies. There were some factors needed to consider in running the application. Some factors include the environment, distance, and the camera quality. The accuracy value of the application is 90%.

**Keywords:** Face recognition, Viola-Jones Algorithm, Fisherface Algorithm, Real time Video Feed