



FINAL YEAR PROJECT REPORT

**FACE POSE DETECTION AND EXTRACTION
FROM VIDEOS TO CREATE AND LABEL
FACE DATABASE**

In fulfillment of the requirement

For degree of

BS (Information Technology)

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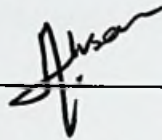
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2016-2020

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We hereby declare that this project report is based on our original work except for citations and quotations which have been duly acknowledged. We also declare that it has not been previously and concurrently submitted for any other degree or award at Bahria University or other institutions.

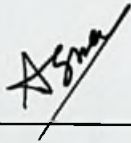
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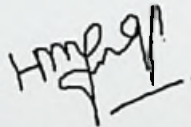
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FACE POSE DETECTION AND EXTRACTION FROM VIDEOS TO CREATE AND LABEL FACE DATABASE

ABSTRACT

In image processing and video analysis field, the recognition of occluded faces and the image with pose variations become a challenge. We therefore present a training dataset based on variation of poses and angles of faces. It is based on video analysis for extracting the face images of multiple persons based on different poses of face. These different poses are detected, extracted, and then stored in a database for labelling. The labelling is based on the pre-defined angles and view of a human face. Any video having multiple faces can be used to create the dataset. The general framework is to first detect all the faces in the video. After detection, the faces extracted and kept in an initial database. Each face has given an entity name, all face poses are extracted from the video by analyzing each frame. This process will continue for all detected faces. Lastly it labels each face different pose according to the pre-defined labelling matrix and a complete dataset will be generated. The main objective of the project is to effectively detect faces with pose variation problem.

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