



**Bahria University**  
Discovering Knowledge

**FINAL YEAR PROJECT REPORT**

**PERSON IDENTIFICATION USING  
BIOMETRIC MODALITIES**

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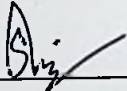
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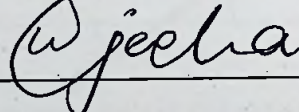
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We hereby declare that this project report is based on our original work except for citations and quotations which have been duly acknowledged. We also declare that it has not been previously and concurrently submitted for any other degree or award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

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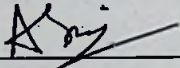
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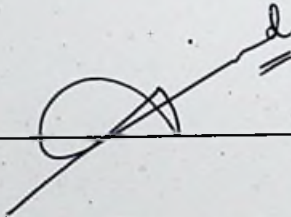
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**APPROVAL FOR SUBMISSION**

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## PERSON IDENTIFICATION USING BIOMETRIC MODALITIES

### ABSTRACT

Biometric modalities provides us the study of characteristics related to physiological traits for the verification or identification of a person. Unimodal biometric arises many shortcomings and disadvantages of security, accuracy, performance imperfection, storage space and data handing. Using multimodal modalities, security rate will be much higher but accuracy, performance perfection, storage space and data handing are still a subject of research and discussion. In our current research study we are working with multimodal biometric modalities of face and thumb impression recognition for the validation of any individual to obtain high security with better accuracy using two modalities of face and thumb impression. System will be able to train face and thumb impression of persons, and for testing and validation both modalities are necessary to input or define. We are using Discrete Cosine Transform algorithm which collects features point of the sample, furthermore the data will be classified by the Support Vector Machine Technique to give the correct outcome. Another contribution of our project is our own collected dataset. There were lack of datasets which can provide us both facial images as well as thumb impression of the same person. The results have better accuracy rate and two modalities (face and thumb impression) are necessary to input for validation which makes the system more secure an applicable in many desired cases.

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