

CERTIFICATE

It is certified that MS(CS) thesis titled “Offline Signature Recognition Using Neural Network” prepared by Ms. Sadaf Ambreen Abbasi, enrollment number 5706 has been approved for submission

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Abstract

Signature is one of the most important entity to recognize a person. Verification using signature of an individual can be either offline or on line based on the nature of application. For online signature verification systems the signatures are capture at run time means at the time the signature is made. Online verification is much costly as compare to offline. The offline systems need scanned images of signatures. Our method of research is offline signature verification using a simple shape based geometric features, global features and texture features of scanned image. The geometric features that are used are Aspect Ratio, Normalized Area, Center of Gravity and the Slope of the line joining the Centers of Gravity of two halves of a signature image. The global features are Image Cropping, Maximum Horizontal Projection, Maximum Vertical Projection, and Edge Point Calculation. Before extracting the features, preprocessing of a scanned image is necessary to isolate the signature part and to remove any spurious noise present. The system is initially trained using a database of signatures obtained from those individuals whose signatures have to be authenticated by the system. Feedforward neural net is used for our system verification process.

Declaration Form

I Sadaf Ambreen Abbasi declare that the thesis titled “Offline Signature Recognition Using Neural Network” submitted by me in fulfillment of the requirement for the degree of MS. This thesis represents research carried out at Iqra University Islamabad Campus and aims encouraging discussion and comment. The observations and viewpoints expressed are the sole responsibility of the author. It does not necessarily to represent position of Iqra University Islamabad Campus or its faculty. I also understand that if evidence of plagiarism is found in my thesis at any stage, even after the award of a degree the work may be cancelled and the degree revoke.

Sadaf Ambreen Abbasi

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Dedication

I would like to dedicate this thesis to my brother and parents who have been a great source of inspiration throughout my life and they have provided a lot of moral support to me and enable me to become what I am today. I would also like to dedicate this thesis to my honourable teachers who gave me precious knowledge.

Acknowledgement

All praise to the ALLAH the praise worthy, the merciful, the kind and every blessing of the ALLAH be on His Holy PROPHET MUHAMMAD (PBUH) who is always a source of guidance and wisdom for humanity as a whole. ALLAH blessed us towards the completion of this project.

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