## UCS! UNIVERSITY

FACULTY OF ENGINEERING, ARCHITECTURE & BULLT ENVARONMENT

DESIGN AND IMPLEMENTATION OF A SIGNATURE VERIFICATION SYSTEM FOR DSP APPLICATIONS

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## Abstract

A Signature Verification system for DSP applications has been designed, based on global signature features information and support vector machine (SVM) used for the classification & verification is presented. The signature information is extracted as time functions of various static and dynamic properties of the signatures then the discrete 1-D wavelet transform (DWT) is performed on these features. The system is tested with a combination of DWT –SVM and DWT-DCT / SVM. The system gives good results of all approaches used. Results of EER: 0.062~0.1084 have been attained on the SVC2004 database and the MCYT-100 signature database used for the testing of the algorithm. Something peculiar is that these two database are from different domains.