



Paper Presentation Certificate

This is to certify that the paper entitled

Image Classification using Convolution Neural Network Based Hash Encoding and Particle Swarm Optimization

by *Sameer I. Ali Al-janabi; Sufyan T Faraj Al-Janabi; Belal Al-Khateeb*

has been presented at the

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Hatem Masri , Program Chair

A handwritten signature in purple ink, appearing to read "Hatem Masri".