

Review on Hand Written Signature Forgery Detection using Deep Neural Networks

Amrutha R¹, Annapoorna A C², Bhavana K N³, Bhoomika K B⁴, Vijetha T S⁵

Under Graduate Students, Department of Electronics and Communication Engineering¹⁻⁴

Assistant Professor, Department of Electronics and Communication Engineering⁵

Alvas Institute of Engineering and Technology, Mijar, Mangalore, India

amrutharamesh029@gmail.com, annapoorna.a.c2702@gmail.com

,bhanubhavana334@gmail.com,bhoomikagowdak26@gmail.com,tsvijetha@aiet.org.in

Abstract: *Handwritten signature verification is an essential method for authenticating documents in various industries, including banking, legal, and government sectors. However, the increasing prevalence of signature forgery presents a significant challenge to the security and integrity of systems relying on handwritten signatures. Traditional approaches to signature verification, such as the ones based on manual inspection or low-level machine learning techniques, are unable to detect forgeries with reasonable accuracy, especially when variations in writing style or slight changes in the dynamics of a signature occur. Recently, deep neural networks have emerged as a highly promising tool to help with this task. DNNs, such as CNNs and RNNs, provide the capability to automatically extract complex features from signature data, which allows for more accurate and efficient verification.*

Keywords: Handwritten signature verification