

# Signature Verification and Forgery Recognition System using KNN, Backpropagation and CNN

Prof. A. H. Joshi, Kaveri Ahire, Prachi Thete, Harshal Mahajan, Suraj Aher

Department of Computer Engineering,

Pune Vidyarthi Griha's College of Engineering & Shrikrushna S. Dhamankar Institute of Management, Nashik

**Abstract:** *Biometrics is now widely used all over the world for the identification and verification of people and their signatures. A person's handwritten signature is a unique identifying work of human that is primarily used and recognized in banking and other financial and legal operations. Handwritten signatures, on the other hand, are becoming increasingly valuable due to their historical significance as a target of deception. The Sign Verification System (SVS) tries to determine whether a sign is genuine (created by the specified individual) or forged (produced by an impostor). Using images of scanned signatures and other documents without dynamic information about the signing process has proven difficult, especially in offline (static) situations. The use of Deep Learning algorithms to learn feature signature picture representations has been well-documented in the literature over the last five to ten years. Here, we examine how the subject has been studied throughout the last few decades, as well as the most recent developments and future study plans.*

**Keywords:** Signature Verification, KNN, CNN, Backpropagation