

# Signature Verification System Using CNNs

Mr. Omkar V. Khute<sup>1</sup>, Ms. Leena Patil<sup>2</sup>, Mr. Yash Chaudhari<sup>3</sup>,

Mr. Dhiraj Patole<sup>4</sup>, Mr. Sarthak Nikam<sup>5</sup>

Professor, Department of Information Technology<sup>1</sup>

Students, Department of Information Technology<sup>2,3,4,5</sup>

Mahavir Polytechnic, Nashik, India

**Abstract:** *In today's digital age, verifying signatures is crucial for authenticating documents and preventing forgery. Traditional methods rely on manual inspection, which can be time-consuming and prone to errors. To address this, researchers have developed signature verification systems using Convolutional Neural Networks (CNNs). These systems leverage machine learning to automatically distinguish between genuine and forged signatures, enhancing accuracy and efficiency.*

**Keywords:** Convolutional Neural Networks (CNNs), Signature Verification, Forgery Detection, Deep Learning, Online & Offline Signature Verification, Image Processing, Feature Extraction