

# **AI-Based Digital KYC Verification System**

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**Abstract:** *In this research, an AI-based digital KYC verification system named VerifyAI is proposed to automate identity authentication for online services. Traditional KYC processes rely heavily on manual verification, which often leads to delays and potential human errors. The proposed system utilizes computer vision and artificial intelligence techniques to improve both accuracy and efficiency. Users are required to upload an identity document along with a live selfie image. The system applies Optical Character Recognition (OCR) to extract important details from the document and performs facial comparison between the document image and the captured selfie. To enhance security, a liveness detection mechanism is implemented to ensure the physical presence of the user during verification. Additionally, fraud detection techniques are used to identify possible document manipulation. The system is developed using Python, Flask, and SQLite database. The proposed approach aims to deliver a faster, more secure, and automated KYC verification solution.*

**Keywords:** Artificial Intelligence, Digital KYC, Computer Vision, OCR, Face Verification, Identity Authentication

