

# Diabetes Detection using Cutting-Edge Technology

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**Abstract:** *Diabetes Mellitus is a chronic disease with increasing global prevalence. Accurate and early detection of diabetes is critical to prevent complications and reduce the economic burden. The current study proposes a cutting-edge approach using deep learning algorithms, specifically Convolutional Neural Networks (CNN) and other hybrid models integrated with patient data and image-based diagnostics such as retina scans. These techniques outperform traditional diagnostic methods due to their ability to learn complex patterns from large datasets. The proposed system can be deployed in healthcare centers or as a mobile application to help diagnose diabetes with high accuracy, aiding both healthcare professionals and patients.*

**Keywords:** Diabetes, Deep Learning, CNN, Diagnosis, Medical Imaging

