

# Mathematical Script Resolver using Convolutional Neural Network

**Rahul Kumar Srivastava, Anirudh Som, Raman Nirwal, Sameer Gupta**

Department of Computer Science And Engineering (Artificial Intelligence)

Meerut Institute of Engineering and Technology, Meerut

**Abstract:** *This research investigates the development of a robust equation solver for handwritten equations utilizing Convolutional Neural Networks (CNNs). Recognizing handwritten mathematical expressions presents a significant challenge in computer vision and machine learning due to the variability and complexity of handwritten symbols. The paper reviews various object and character recognition methods and their applications, emphasizing the deep learning architecture involving CNNs. A dataset of handwritten equations is employed to evaluate the proposed solution, focusing on accuracy, fault tolerance, and potential improvements. The results demonstrate the effectiveness of the CNN-based approach in accurately recognizing and solving handwritten equations, highlighting future directions for enhancing the model's performance and expanding its capabilities.*

**Keywords:** Convolutional Neural Networks

