

HANDWRITTEN MATHEMATICAL EQUATION SOLVER USING CNN

SUBMITTED BY

ANILA A L

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ABSTRACT

With the advancement in technology, machine learning and deep learning are playing a crucial role in present times. Now, machine learning and deep learning techniques are being employed in handwriting recognition, robotics, artificial intelligence, and many more fields. Developing such system requires training our machines with data, making it capable to learn and make required prediction. Machine Learning is an application of artificial intelligence (AI) that provides systems the ability to automatically learn and improve from experience without being explicitly programmed. This project presents a **Handwritten Mathematical Equation Solver using Convolutional Neural Network** with some image processing techniques to achieve a decent accuracy of 98.46%. A Handwritten Equation solver using CNN equation can contain any digit from 0-9 and symbol +,x,- works on image with white background and digits/symbols are in black. It can run all the three ipynb files either separately or sequentially. A convolutional neural network, or CNN, is a deep learning neural network designed for processing structured arrays of data such as images. Convolutional neural networks are widely used in computer vision and have become the state of the art for many visual applications such as image classification, and have also found success in natural language processing for text classification.