

EQ-sol

Project Batch #5



Meet our Team!

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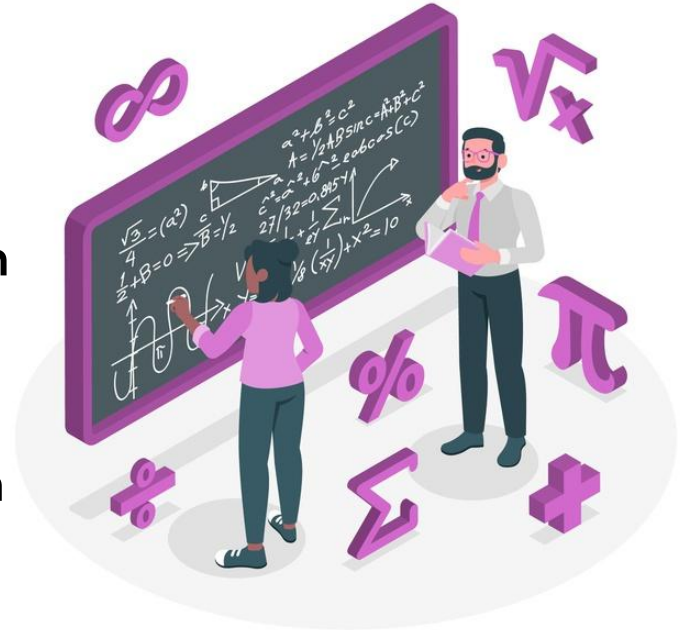
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Problem Statement

- We are mostly used to handwritten mathematical equations.
- Sometimes, you want to find the solution online, but it is cumbersome to translate the handwritten equation onto the computer.
- We offer an easier (and more convenient) way to solve handwritten mathematical equations



Introduction

- EQ-sol is an application where the user scans handwritten mathematical equations, and the corresponding solutions are displayed by the application.
- Some of the features include:
 - Linear equations
 - Quadratic equations
 - Logarithms (and Euler numbers)
 - And more



Methodology

- A picture of the handwritten equation is taken as input.
- Convolutional Neural Network (CNN) is used to extract mathematical symbols (including numbers)
- Basic python operations along with additional libraries such as Math and SciPy are used to solve the equation
- React and Flask is used to create the app



Requirements

- A PC with sufficient GPU to train the model
- A handwritten dataset containing mathematical symbols (including numbers)
- The required programming libraries and framework



Conclusion

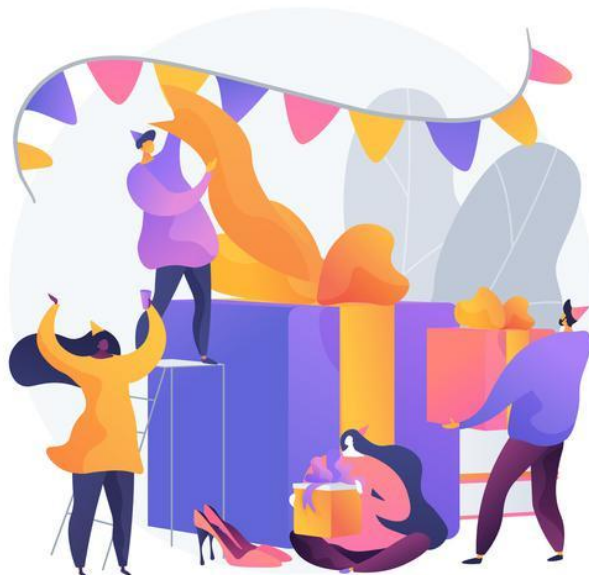
In a place where most of everything we do is handwritten, EQ-sol is a convenient tool that eases our process of finding solutions

Reference papers:

Deep Learning for Symbolic Mathematics

Camera Based Equation Solver for Android Devices





Thank You