

# Rock, Paper and Scissors Image Classification

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## 1 Introduction

The following project aims at developing a Convolutional Neural Network capable of recognizing rock, paper and scissors hand gestures.

## 2 Dataset

The dataset is composed of 2189 pictures in a .png format and divided in three classes: 1. Rock, with 726 pictures. 2. Paper, with 712 pictures. 3. Scissors, with 750 pictures.

## 3 Preprocessing and Data Augmentation

## 4 Train/Validation/Test Split

## 5 Model and Training

## 6 Results

## 7 Discussion and Conclusion

## 8 Bibliography

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5. Understand conv2d parameters: <https://www.codegenes.net/blog/conv2d-parameter-object-input-pytorch/>
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`hyperparameter_tuning_tutorial.html` 7. Stochastic Gradient Descent and Momentum: <https://www.lunartech.ai/blog/mastering-stochastic-gradient-descent-theory-and-practice>

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