

# Machine learning con applicazioni

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## Abstract

The aim of this project is to train neural networks for the classification of chess pieces.

## 1 Dataset

The dataset <sup>1</sup> is composed by 6400 rows and 1025 columns.

- Each row represents an image of a chess piece with the respective square color in greyscale;
- the first column is the
- ao

[Bergstra and Bengio(2012)]

akjsj [Geron(2017)] ncc [Kingma and Ba(2014)]

## References

[Bergstra and Bengio(2012)] J. Bergstra and Y. Bengio, J. Mach. Learn. Res. **13**, 281–305 (2012).

[Geron(2017)] A. Geron, Hands-on machine learning with Scikit-Learn and TensorFlow : concepts, tools and techniques (O'Reilly Media, Sebastopol, CA, 2017).

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<sup>1</sup>The dataset can be found at the link <https://www.kaggle.com/datasets/mr11261/chess-squares-from-chess-diagrams>

[Kingma and Ba(2014)] D. P. Kingma and J. Ba, Adam: A method for stochastic optimization (2014).