

Machine Learning

Laboratory on unsupervised learning

Samuele Bortolotti Steve Azzolin

University of Trento

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Set-up on Google Colab

Open the file on Google Colaboratory:



Figure 1: QR code to open Colab

Take-Home Assessment

Apply unsupervised learning techniques to explore, cluster, and interpret a dataset of your choice.

Steps:

- ① Choose an unsupervised dataset.
- ② Apply clustering algorithms: K-Means and Gaussian Mixture Models.
- ③ Determine the optimal number of clusters using the Silhouette Score and Elbow Method.
- ④ Compare clustering methods and **explore other methods** in scikit-learn.



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Suggested Datasets

- ① Iris Dataset
- ② Mall Customers Dataset

