



# ESI-SBA- ÉCOLE SUPÉRIEURE EN INFORMATIQUE 08-MAI-1945

Machine learning | [n.dif@esi-sba.dz](mailto:n.dif@esi-sba.dz)

## MINI PROJECT

1. Choose a machine learning application that is based on unsupervised learning techniques (association) or a semi-supervised method.
2. Search for one or multiple datasets related to the chosen domain.
3. Apply preprocessing techniques according to the application domain and the methods used for training.
4. Conduct multiple training sessions by varying training algorithms or their hyperparameters.
5. Deploy the best model in an application (web or otherwise) to make predictions on new samples introduced by the user.
6. Write a report that presents the theory behind the used techniques, visualizations of the dataset before and after preprocessing, a comparative study between the obtained results, the best model, and the criteria used for choosing this model.
7. The report must be added to the platform by a single member of the group in the dedicated space on Moodle (groups of 4 students).
8. Consultation sessions will be organized at the end of the semester, during which each group will present its work in a presentation (PPTX), code (Jupyter), and its deployed application.