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Erasmus+ Programme
of the European Union



Machine Learning

Project

Developing Curricula for Artificial Intelligence and Robotics (DeCAIR)
618535-EPP-1-2020-1-JO-EPPKA2-CBHE-JP

General

- To enable the students to get **hands-on experience** in the design, implementation and evaluation of machine learning systems.
- Teams: **Two students** each (one student in approved cases)
- Solve a practical machine learning **problem of your choice**.
- Use **Python**.
- Good projects involve using **alternative approaches** and evaluating their performance in solving the problem.

General

- Article: **Project-Based Learning for Data Scientists**: Becoming a Data Scientist just became a whole lot easier
- Author: Kishen Sharma
- Link: <https://towardsdatascience.com/project-based-learning-for-data-scientists-df6a8f74e4a1>

General

- **Marks:**

- Report 10%
- Presentation 10%

- **Timing:**

- Tue 6 Dec 2022 Submit proposal
- Tue 10 Jan 2022 Submit report & present project

Project Proposal

- One to two-page proposal
- Specify problem
- Specify sample size and source
- Structure
 - Title
 - Students' names
 - Problem definition
 - Data description
 - Samples

Research Report

- **Four to 8-page** report
- Use IEEE A4 conference template at http://www.ieee.org/conferences_events/conferences/publishing/templates.html
- In the introduction, include
 - Motivation
 - Problem definition
 - Literature review
- **Describe your data** and development environment.
- **Specify the source of your base code.**
- **Describe any preprocessing, feature extraction and selection, techniques used, and post-processing.**
- Give results and comments.
- Give conclusions (work done, main results, future work).
- Include your source code in an appendix after the list of references.

Research Presentation

- Prepare Power Point slides
- Ten minutes long
- Must be clear and useful presentation, must add knowledge to fellow colleagues