Machine Learning

MAMME

Lluís A. Belanche

belanche@cs.upc.edu

Soft Computing Research Group

Universitat Politècnica de Catalunya

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Half-term project (I)

Assessment

20 % - technical/theoretical correctness

20 % - methodological correctness

20 % - amount & quality of experiments

10 % - originality of work

20 % - discussion & conclusions

10 % - introduction & previous work

Half–term project (II)

Possibilities

A) Apply an **standard kernel method** (SVM, kRR, kPCA, …) to a **specific problem** of your interest, with comparison to other approaches.

   The focus is on the application

B) Choose and apply an algorithm/technique that has already been **kernelized** (except the SVM), study it [program it], and apply it to one or more [benchmark] problem(s); comparison to the standard version.

   The focus is on the algorithm/technique

C) Study a **non-standard kernel** (not for $\mathbb{R}^d$), and apply it to a specific problem of your interest, with one or more kernel method(s).

   The focus is on the kernel function

Half–term project (III)

Format

- Preferably groups of **two** people (singles and trios accepted upon explicit permission)

- Written document (pdf preferred), recommended size 8-15 pages

  Structured according to scientific standards:

  1. Title, Name(s), Abstract, Introduction, Previous work

  2. Own work: Theory, Experiments, Discussion

  3. Conclusions, Self-assessment and Future work

- R code (.r, .Rmd) delivered as separate file(s)

Half-term project (IV)

Important information

- Please do not choose the analysis of large or very large datasets unless you make sure you have the required computational power

- Purely theoretical or purely experimental works are accepted

- Review or Tutorial works are accepted, under some conditions

Delivery date: Preferably no later than **June 16, 2022 at 12h**

Extra time deadline: June 17, 2022 at 20h, with a penalty of 0.5 points.