Computational analysis of biological structures and networks

Instruction for the thematic workshop

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Assessment methods

Two parts:

- *First part: few questions on course topics (**written exam**, during exam sessions)*

- *Second part: **talk** within a tematic workshop (as in a conference)*

`From introduction`

Assessment methods

Talk within a thematic workshop: details

- *The topic of the thematic workshop will be decided in advance (before middle of November)*

- *Each student has to choose a scientific paper to be presented in 10 minutes*

- *One thematic workshop will be held at the end of the course (registration needed by early December)*

- *Other sessions in June and September*

From introduction

Procedure

- All students who want to participate to the first session need to register by sending an email (Deadline: 26/11)

- All registered students have to choose a paper on the assigned topic to be presented at the workshop (Deadline: 18/12)

  - NOTE: One different paper per student (a list of taken papers will be maintained on the web page)

CHECKPOINT: the chosen paper should be approved by the instructor (send an email)

Topic

- The topic for this year is "**Advanced Learning paradigms in Medical bioinformatics**"

  - Description of advanced learning paradigms (not seen during classes)

    - Examples: constrained unsupervised learning, learning from Positive and unlabelled examples, learning from unbalanced classes, etc etc.

  - Application of advanced learning paradigms to interesting biomedical problems

Procedure

- **Preferred**: papers published in Briefings in Bioinformatics, Bioinformatics IEEE/ACM Transactions on Computational Biology and Bioinformatics, BMC Bioinformatics, BMC Genomics, Artificial Intelligence in Medicine or other high impact journals (Nature, Science, ...)

- **Alternatives**:

  - Other papers published journals of Elsevier, IEEE, ACM, Springer and Oxford Academic can be considered

  - Conference papers published in IEEE-IAPR-ACM conferences

The talk

- 10 minutes (strict!)
- Suggested structure of the talk:
  - Introduction to the problem
  - Main idea (no formulas!) together with the relevance with respect to previous works
  - Some results (if any) and discussion