PRAT
Seminars and image processing in practice

2023-2024

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- http://www.perso.telecom-paristech.fr/~tupin/PRAT.html

Objective: Put in practice acquired knowledge

Putting into situation facing real cases of companies or research laboratories

- **Seminars**
- **Project**

Mandatory course credited by **6 ECTS**

■ **Project (resp. V. Meas-Yedid)**

- 2 parts:
  - Bibliography
  - Implementation
- Individual work
- Supervision by 1 or 2 supervisors

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Organization:

- Duration: 14 sessions
- Choice of a subject: http://www.bioimageanalysis.org/sujets-prat/
- Send 2 or 3 choices with priorities to V. Meas-Yedid
- Once the subject are attributed, contact the supervisor

Validation:

- *Proposal of a plan and papers for 22th of oct.*
- Bibliographic report: 12th of novembre 2022
- Oral presentation of the project at the end: 5th of feb. 2023

■ **Bibliographic report (7 points)**
- Written report on the bibliographic part
- Deadline 12th of november
- Evaluation: by the supervisor
- Evaluation criteria:
    - Understanding of the main paper
    - Search of other references and synthesis
    - Clarity
    - Provisional schedule for the project based on the bibliography study

- **Oral presentation (5 points)**
  - Oral presentation of the whole project (15 min + 5 min de questions)
  - To be done on 5th of february
  - Evaluation: by the course leaders
  - Evaluation criteria:
    - Presentation of the context of the project
    - Highlighting of the main points of the implemented method
    - Discussion on the obtained results and critical analysis
    - Link with other approaches
    - Clarity of the oral presentation

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■ **Project (8 points)**

- Global evaluation of the project based on the project reports (report and codes)and on the interaction with the supervisor

- Evaluation: by the supervisor

- Evalusation criteria:

    - Quality of the project implementation and provided code

    - Quality of the final written report

    - Quality of the experiental analysis (experiments set up, critical analysis of the results)

    - Initiative and autonomy (improvement proposal, problem solving)

    - Interaction with the supervisor (answers to mails, punctuality, …)

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PRAT Seminars

- **Seminars (resp. F. Tupin)**
  - Introduction to different applicative domains of image processing (in link with companies and research labs)
- **Examples:**
  - Computational photography (DxO)
  - Biometry (Idemia)
  - Genetics imaging
  - Astrophysics imaging (CEA)
  - Remote sensing
  - Introduction to topological analysis of dara

PRAT Seminars / project

- **Organization :**
  - Seminars at Jussieu at 1:45 p.m
  - Program : http://www.perso.telecom-paristech.fr/~tupin/PRAT.html

- **Validation :**
  - attendance to the seminars is mandatory (any unjustified absence is sanctioned by a deduction of 2 points on the final grade)

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- Session for bibliographic search

- Report writting: on the methodological part (papers analysis), plagiarism prohibited, format of the references (authors, paper title, journal, year)

- Programming langages depending on the project (to be discussed with the supervisor)

- Oral presentation (15 min + questions) : context, methodological part, experimental part, critical analysis of the approach, conclusion

NB: the project requires an important personnal work

You must be organized and anticipate in order to progress regularly

Contact your supervisor as soon as the projects are attributed

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