PRAT
Seminars and image processing in practice
2022-2023
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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
Organization:

- Duration: 14 sessions
- 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 25th of oct.
- Bibliographic report: 8th of novembre 2021
- Oral presentation of the project at the end: 6th of feb. 2022
Bibliographic report (7 points)

- Written report on the bibliographic part
- Deadline 8th 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
PRAT project (2)

- **Oral presentation (5 points)**
  - Oral presentation of the whole project (15 min + 5 min de questions)
  - To be done on **6th 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
Prat project (3)

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
- Evaluation criteria:
  - Quality of the project implementation and provided code
  - Quality of the final written report
  - Quality of the experiential analysis (experiments set up, critical analysis of the results)
  - Initiative and autonomy (improvement proposal, problem solving)
  - Interaction with the supervisor (answers to mails, punctuality, …)
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 data
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)
Some recommendations

• Session for bibliographic search
• Report writing: on the methodological part (papers analysis), plagiarism prohibited, format of the references (authors, paper title, journal, year)
• Programming languages 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 personal work
You must be organized and anticipate in order to progress regularly
Contact your supervisor as soon as the projects are attributed