

SSI Project

I. Introduction

In the project, you will apply the different notions studied in class and in the labs to solve a real word problem.

Three problem are suggested with references, and you have to select one.

Important:

- You have to work in groups of two or three! (not one or four, but two or three)
- The goal is not to reproduce the reference papers, but to propose your own solutions.
The references are provided as guide
 - to get introduce to the problem
 - to get more reference papers
 - to familiarize with the data and tools
- You have to apply some of the methods we study and propose your own solutions
- **I will check for the originality of the submitted work!**
 - you can check online, some code might be available, for inspiration ...
 - but, I will not accept any copy/paste solution

II. Evaluation

Evaluation will include:

1. A report, describing the problem, your methods and results (40%)
2. A defense, at the end of the semester (30%)
3. Your code, well written and documented ! (30%)

III. Topics

Here are 3 proposed topics that have been addressed in literature, and are still active research topics.

1. **Retinal image classification and lesions detection**
2. **Text detection and recognition**
3. **Human activity recognition from videos**

A set of research papers on each topic is given (check the course folder on Edmodo). Again, the goal is not to reproduce the reference papers, but to propose your own solutions.

IV. Organization

This is a project that you have to complete by yourselves. However, we will have regular meetings to discuss advances and/or problems.

We will also have a midterm presentation of progress.

1. Check the papers and submit your group and choice before March 10th
2. First meeting, March 16th
3. Second meeting April 4th
4. Third meeting, May 5th
5. Defense, June 6th