# How to maximize your grades for the project report

Advice from the teaching assistants of 8DC00

# General notes for project 1

- Don’t forget to include both intensity-based and point-based registration in your report.
- The minimal solution to the project is already provided by the project description, make sure to build off this in your project.
- Don’t forget to include the code files when you hand in the report so we can reproduce your results.

# General notes for project 1

- Don’t upload a word document use a pdf instead (remember to also check the pdf before submission). Preferably make it in LaTeX/overleaf.
- The reports must be written using scientific writing (introduction, methods, results, etc.) and must be properly formatted (good quality figures, captions for figures, references to the figures in text, referencing appendices, etc.)
- References
  - Notebook and other Python files do not belong here!!
  - References to lectures is OK but additional references to research papers is still expected.
  - Use a proper referencing style (like APA)

# Introduction

- A scientific report should always have a research goal (a research question and hypothesis is highly recommended)
  - Your goal is NOT to develop a Python code!!!
  - Be specific when you make a comparison and avoid using terms such as “reliable”, “better” and “useful”. Instead, describe in what terms (e.g. NCC or MI)
- Introduction: broad picture (domain application) and problem statement. Then, state your goal and get more specific towards your research question.

# Methods

- Explain what affine and rigid transformations are.
- Don’t just look at one example of one patient/slice for the methods, you want to draw conclusions based on a generalisation such that it is not specific to one patient.
- Do not mention implementation detail (i.e. function names, file names, etc.).
- The paper should be understood without knowing how it was implemented.
- Do not add sections of python code in a report.

# Results

- Image registration is used to find the best possible registration. So what function do learning curves provide? Only provide these if something unexpected happened. Otherwise only provide highest similarity metric value.
- Do not put every obtained figure in this section.
- Describe your observations objectively and refer to figures/tables!
  - Captions! (Do not forget figures in Appendix)

# Discussion

- Make sure not to directly compare the values of MI and NCC. Just because MI gives a lower value does not mean that the images are registered worse. MI and NCC ‘measure’ two different things.
- The discussion is NOT a second result section!
- “This shows that our Python code works” is not a relevant addition to your discussion.
- Answer your research question at the end of this section.
- Be critical about the reliability of the choices you made and the data you used/created.