

Numerical Computing

2022

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Solution for Project 4

Due date: Wednesday, 23 November 2022, 23:59 AM

Numerical Computing 2022 — Submission Instructions (Please, notice that following instructions are mandatory: submissions that don't comply with, won't be considered)

- Assignments must be submitted to iCorsi (i.e. in electronic format).
- Provide both executable package and sources (e.g. C/C++ files, Julia). If you are using libraries, please add them in the file. Sources must be organized in directories called:

 $Project_number_lastname_firstname$

and the file must be called:

 $project_number_lastname_firstname.zip\\project_number_lastname_firstname.pdf$

- The TAs will grade your project by reviewing your project write-up, and looking at the implementation you attempted, and benchmarking your code's performance.
- You are allowed to discuss all questions with anyone you like; however: (i) your submission
 must list anyone you discussed problems with and (ii) you must write up your submission
 independently.

Contents

- 1. Spectral clustering of non-convex sets [50 points]
- 2. Spectral clustering of real-world graphs [35 points]