

Artificial Intelligence

Assignment 1

Due date: October 21st, 2022

Marks: 10 + TA's (4)

Task:

Given a larger and a smaller template image, you have to write a complete Evolutionary Algorithm that takes the two images and solves the template matching problem, i.e. finds the coordinates or location of the smaller image within the larger image.

Submission includes:

Group size of 2 is allowed.

Besides the **code files**, submit a **detailed report** describing the 4 stages of scientific process in the case of this template matching problem, i.e. natural phenomenon, theory, computational model, application.

Your report should have 4 sections, and the description of the **experiments** you conducted to develop the algorithm and the **results** you eventually achieved through your code for template matching should be smoothly embedded in the last 2 sections – computational model and application.

Submission instructions:

- 1) Make a folder on your disk, its name should be **your_group_members_names**.
- 2) It should only have the final code files and final report.
- 3) Zip it.
- 4) Upload on LMS/CMS before the deadline.

Tip:

Assume that the reader of your document is somebody who has not been a part of our classroom, so that person should be able to understand what you mean!