Assignment 1

CSED441 - Introduction to Computer Vision

Due: October 8th (Wed), 23:59 KST

Overview

This assignment consists of two parts with the following distribution:
1. Implementation: 60 points
2. Discussion: 40 points

The goal of this assignment is to gain hands-on experience with local feature extraction, robust model fitting, and homography-based panorama stitching. You will implement key functions(SIFT, RANSAC, Homography), and then conduct parameter experiments to observe how different hyperparameters influence the final panorama. You can complete the assignment by following the steps in **assignment1.ipynb** in order.

If you have any questions, please contact TAs:
- Assignment-related questions: wonseok.c@postech.ac.kr (Wonseok)
- Environment setting related questions: jhpahk@postech.ac.kr (Jaehyun)

Submission Format

Report submission:

Name your report as a single PDF file named: assn1_[your student ID].pdf (e.g., assn1_report_20251234.pdf)

Code submission:

- You will be provided with a starter code package (release.zip).
- First, unzip the file.
- Rename the top-level directory to your student ID (e.g., 20251234/).
- Implement and modify the code inside this directory. Ensure that all required functions are completed.
- Add clear comments in your code.
- After completing the assignment, re-compress the directory back into a zip file named: assign1_studentID.zip (e.g., assign1_20251234.zip)
- Submit this zip file together with your report.