

CS x476 - Fall 2021

Project 4: Local Feature Matching

Setup:

1. Install [Miniconda](#). (If you already have Miniconda installed, you can skip this step)
2. Create a conda environment using the appropriate terminal and command.
 - On **Windows**, open the installed "Anaconda Powershell Prompt".
 - On **MacOS** and **Linux**, you can open a terminal window.
 - Modify and run the command in the terminal, replace the "<OS>" in the following command with your OS (Linux, Mac, Windows): `conda env create -f cv_proj4_configs/proj4_env_<OS>.yaml`
3. Check if the cv_proj4 environment has been created properly.
 - Run: `conda env list`
4. Activate the conda environment.
 - Run: `conda activate cv_proj4`
 - To deactivate it, run: `conda deactivate`
5. Install the project packages.
 - Run: `pip install -e .` inside the repo folder.
 - This is a good practice when setting up a new conda environment that may have pip requirements. It installs the repo as a package in the environment.
6. Open the jupyter notebook to work on the project.
 - Run: `jupyter notebook ./cv_proj4_code/proj4.ipynb`
7. Sometimes jupyter notebook couldn't find the conda environment automatically, to solve that you could optionally run `python -m ipykernel install --user --name=cv_proj4`. Then select the right kernel (cv_proj4) inside your jupyter notebook by clicking the "Kernel" tab at the top and select "Change kernel" in the menu.

Testing & Submission:

1. Ensure that all sanity checks are passing
 - Run: `pytest cv_proj4_unit_tests` inside the cv_proj4_code folder.
2. Compress your code into a zip for submission
 - Run: `python zip_submission.py --gt_username <your_gt_username>`
3. Submit the zip to Gradescope for the code part
 - **NOTE: we have one assignment on Gradescope for Project 4 code**
 - **(x476) Project 4 (code) – 70 pts total**
4. Save the PowerPoint as PDF and submit the PDF to Gradescope for the report part
 - If you are a **4476** student submit to the **(4476)** assignment
 - If you are a **6476** student, submit to the **(6476)** assignment
 - 5pts will be deducted if you make submission to the wrong assignment