

## CS x476 - Fall 2021

# Project 5: Camera Calibration and Fundamental Matrix Estimation with RANSAC

### 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 proj5_configs/proj5_env_<OS>.yaml`
3. Check if the cv\_proj5 environment has been created properly.
  - Run: `conda env list`
4. Activate the conda environment.
  - Run: `conda activate cv_proj5`
  - To deactivate it, run: `conda deactivate`
5. Install the project packages.
  - Run: `pip install -e .` inside the repo folder.
6. Open the jupyter notebook to work on the project.
  - Run: `jupyter notebook ./proj5_code/proj5.ipynb`

### Testing & Submission:

1. Ensure that all sanity checks are passing
  - Run: `pytest proj5_unit_tests` inside the proj5\_release 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
4. Save the PowerPoint as PDF and submit the PDF to Gradescope for the report part