

Coursework 1

- Image filtering and edge detection

- It is on GitHub

git clone https://github.com/ImperialCollegeLondon/Computer_Vision_2022

- Work on coursework_01.ipynb using Jupyter-Lab

Coursework 1

- What to submit?
 - Export or Print the Jupyter notebook as a **pdf** file, which contains code, results and text comments.
- How to submit?
 - Upload to Cate (<https://cate.doc.ic.ac.uk/>)
- When to submit?
 - Due in two weeks time.
- There will be a lab session next week in the lab and on Teams.
 - We will provide general technical help.
 - However, we will not provide model answers.

Calendar - Bai, Wenjia - O... Computing 3rd Year - Spr... 2019-2020 Submissions Materials Tables | Jekyll theme for... Department of Computin... undefined - YouTubeLoop... ImperialCollegeLondon/C... JupyterLab

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Launcher coursework_01.ipynb
Markdown Python 3

Coursework 1: Image filtering

In this coursework you will practice image filtering techniques, which are commonly used to smooth, sharpen or add certain effects to images. The coursework includes both coding questions and written questions. Please read both the text and code comment in this notebook to get an idea what you are expected to implement.

What to do?

- Complete and run the code using `jupyter-lab` or `jupyter-notebook` to get the results.
- Export (File | Export Notebook As...) or print (using the print function of your browser) the notebook as a pdf file, which contains your code, results and text answers, and upload the pdf file onto [Cate](#).

Dependencies:

If you have Jupyter-Lab on your laptop, you can find information for installing Jupyter-Lab [here](#).

python packages you may want to use for completing the coursework. We have provided examples below for importing libraries. If some packages are not installed. In general, new packages (e.g. imageio etc) can be installed by running

```
conda install [package_name]
```

or using its graphic user interface.

```
import imageio
import numpy as np
import matplotlib.pyplot as plt
import noise
import scipy
import scipy.signal
import math
import time
```

1. Moving average filter (20 points).

Mode: Command Ln 1, Col 1 coursework_01.ipynb