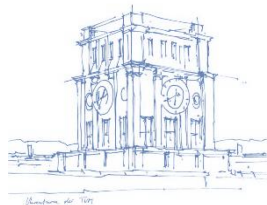


Multiple View Geometry (3D Computer Vision) [IN2228]

Introduction to Exercises

30 April 2025 16:15-18:15

102, Hörsaal 2, "Interims I" (5620.01.102)



Teaching Assistants



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Moodle

Announcements via Moodle - IMPORTANT!

- Sign up in TUM online for access: <https://www.moodle.tum.de/>
 - Emails will be sent to all students enrolled in Moodle
 - We will share common information (e.g., regarding exams)

Moodle Forum

- Ask content questions online so others benefit
- Don't post solutions

Website

Course material uploaded here

<https://cvg.cit.tum.de/teaching/ss2025/mvg>

- Lecture slides
- Theoretical and practical exercises

Email

- For questions regarding the syllabus, exercises, or lecture contents, use Moodle!
- For questions regarding the organization of the course:
mvg-ss25@vision.in.tum.de

Number of the exercises

- Theoretical exercises: 10
- Practical exercises: 5

Theoretical exercises

- Deepen the understanding of lecture content
- Participation in exercises will be a good preparation for the exam
- Sheets are usually uploaded one week in advance



Practical exercises

- Learn by implementing (in Python)
- Submit code to a test server for evaluation
- An exercise is passed if a required score is reached
- Get a grade bonus of 0.3 if 4 in 5 exercises are passed
- The first practical exercise will be released later this week

About the practical exercises

- Download and unzip the base folder cv2mvg.zip
- For each exercise
 - download and unzip the exercise package (e.g., exercise_01.zip)
 - move the unzipped folder into the base folder cv2mvg/

```
✓ cv2mvg
  > datasets
  ✓ exercise_01
```

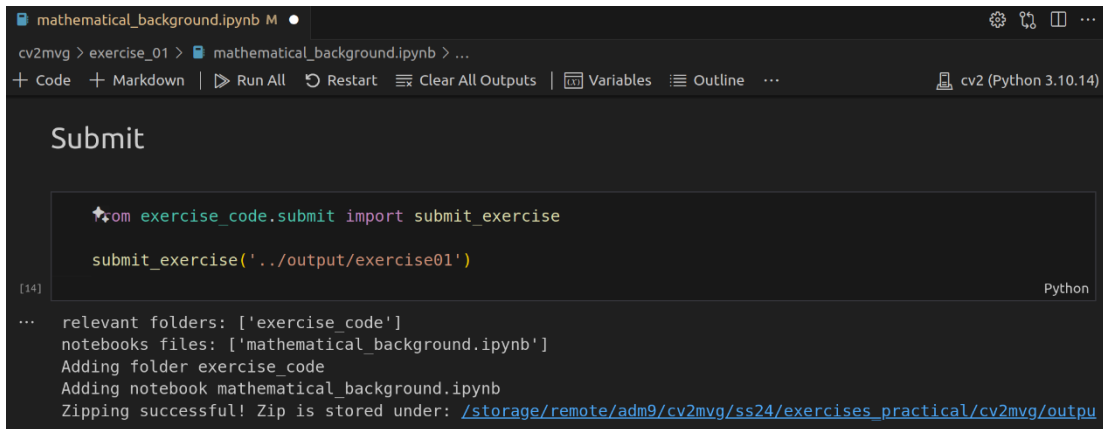
About the practical exercises

- Each exercise package contains all the code necessary
 - A jupyter notebook acts as the guide through the exercise and interface to the code
 - All tasks are clearly marked

```
✓ cv2mvg
  > datasets
  ✓ exercise_01
    > .ipynb_checkpoints
    > exercise_code
    > tests
  📄 mathematical_background.ipynb
```

About the practical exercises

- Last step in each notebook: zip the code for submission



The screenshot shows a Jupyter Notebook window titled 'mathematical_background.ipynb'. The interface includes a top bar with icons for settings, help, and window management. Below the top bar, the current directory is shown as 'cv2mvg > exercise_01 > mathematical_background.ipynb > ...'. A toolbar contains buttons for '+ Code', '+ Markdown', 'Run All', 'Restart', 'Clear All Outputs', 'Variables', 'Outline', and a menu icon. The main content area displays the 'Submit' section with a code cell containing the following Python code:

```
from exercise_code.submit import submit_exercise

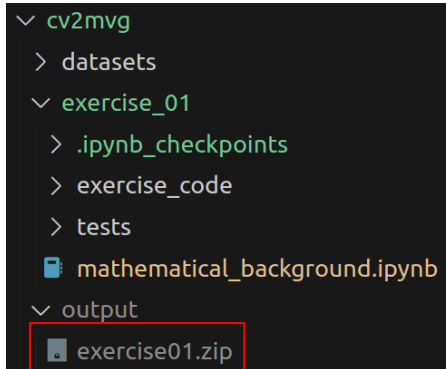
submit_exercise('../output/exercise01')
```

The code cell is labeled '[14]' on the left and 'Python' on the right. Below the code cell, the output is displayed, showing the following information:

```
... relevant folders: ['exercise_code']
notebooks files: ['mathematical_background.ipynb']
Adding folder exercise_code
Adding notebook mathematical_background.ipynb
Zipping successful! Zip is stored under: /storage/remote/adm9/cv2mvg/ss24/exercises\_practical/cv2mvg/outpu
```



About the practical exercises

- Last step in each notebook: zip the code for submission





About the practical exercises

- Test Server <https://cv2mvg.cvai.cit.tum.de/>

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

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MVG

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Forum ↗

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Logged as:

Logout

Exercise submission

Exercise01 – Mathematical Background

Info

- **Description:** Mathematical Background
- **Start:** 2025-04-30 19:00:00
- **Deadline:** 2025-05-13 23:59:00
- **Requirement:** 10.0
- **Max Score:** 100.0
- **Submission:** Within the working period you can submit solutions as often as you want
- **Bonus:** The best score counts for the bonus
- **Evaluation Time:** The maximum evaluation time is 30min.
- **Issues:** In rare cases it can still happen that your submission will get stuck in "queued". If your submission is there for more than 10min, please submit again. - Sorry for the inconveniences.

Upload

Choose File


No file chosen

Upload

About the practical exercises

- Test Server <https://cv2mvg.cvai.cit.tum.de/>

Exercise submission

Exercise01 – Mathematical Background [Optional] 

Info

- **Description:** Mathematical Background
- **Start:** 2024-05-08 18:00:00
- **Deadline:** 2024-05-15 18:00:00
- **Requirement:** 60.0
- **Max Score:** 100.0
- **Submission:** Within the working period you can submit solutions as often as you want
- **Bonus:** The best score counts for the bonus
- **Evaluation Time:** The maximum evaluation time is 30min.
- **Issues:** In rare cases it can still happen that your submission will get stuck in "queued". If your submission is there for more than 10min, please submit again. - Sorry for the inconveniences.

Upload

Browse...

No file selected.

Upload

Your previous submissions

#	Date	Status	Passed?	Score	Download
1	2024/05/08 15:32:56	Finished	✓	100.00	