ML Applications for a Real Problem in Hydraulic and Hydromorphology

- Topic can be chosen by the students or after discussing with the lecturer.
- Project work can be done by two students:
  - Test and develop MATLAB-scripts
  - Write a 15-20 page report about the project, which
    - ✓ Should clearly and succinctly describe the project goal, methods, and model results.
    - ✓ Must be submitted by 25 July 2022 at the latest.
  - Project presentation
    - ✓ on 26 July 2022 (from 8:00 am)
    - ✓ Time and ZOOM-link for each group will be informed
    - ✓ Each group will be given 15-20 minutes for the oral presentation of their project, with an additional 5-10 minutes for each student to answer questions.
  - The project report and presentation will be graded on the basic of their understanding of the overall course material, and their ability to work independently with the relevant application.

Possible data for your project

1. Germany

https://www.gkd.bayern.de/de/fluesse/abfluss/isar/grafrath-16603000/download?zr=gesamt&beginn=01.07.2019&ende=23.07.2019&wertart=ezw

2. USA

https://www.sciencebase.gov/catalog/items?q=&filter=tags%3Dsuspended+material+%28water%29

https://waterdata.usgs.gov/co/nwis/uv/?site_no=06708690&PARAmeter_cd=00045,72192

Module Grade

- Homework assignment performance (40%)
- Project report (30%)
- Project presentation (30%)