

# Lab session 8

Machine Learning for Behavioral Data (CS-421)

April 21, 2021

# Today

- **08:15 09:00** Tutorial on Recommender Systems Part II
- **09:00 09:15** SHORT BREAK
- **09:15 10:00** Tutorial on Structure Discovery

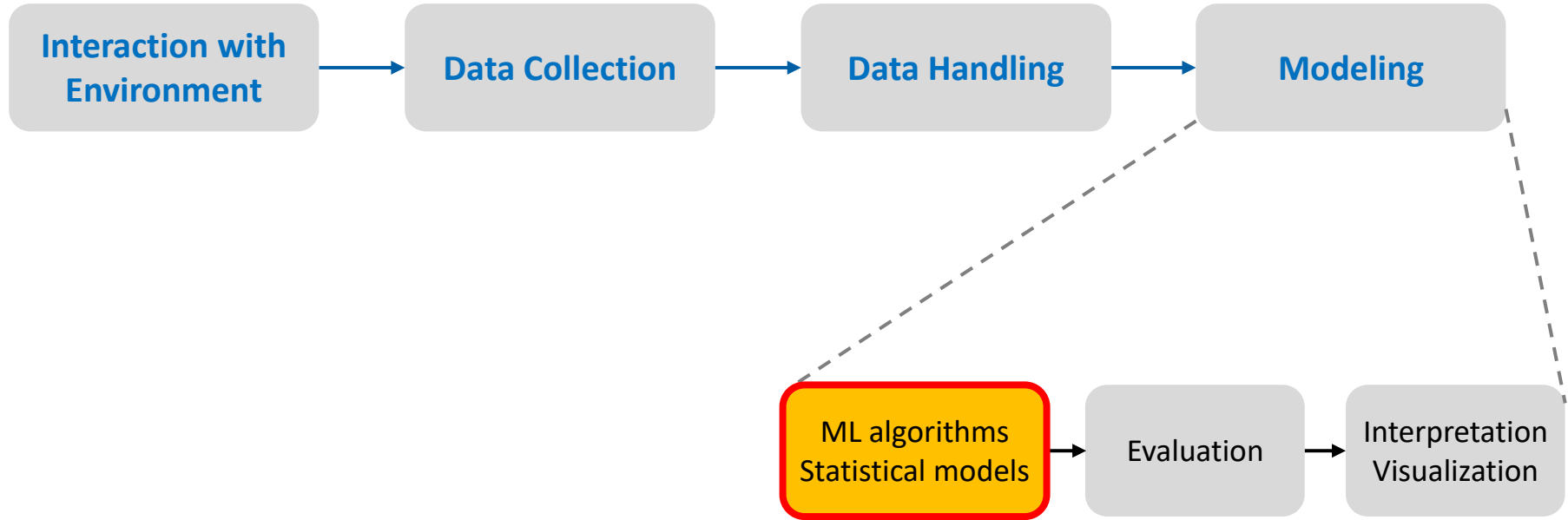
There will also be an office hour during the lab session, organized as a parallel breakout room.

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# Where we are

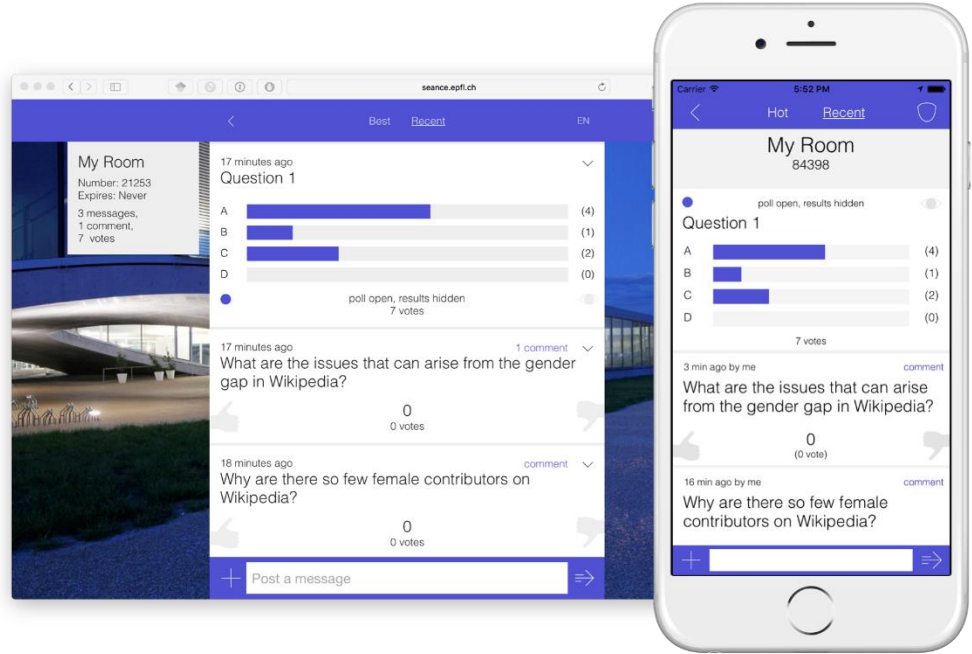
| Week | Lecture                          | Lab Sessions  | Projects  |
|------|----------------------------------|---------------|---|
| 8    | Recommender Systems              | Tutorial + PO | M2: Research Questions and Exploratory Analysis |
| 9    | Neural Networks                  | Tutorial + PO |   |
| 10   | Sequence Mining                  | Tutorial + PO |   |
| 11   | Representation/ Feature Learning | Tutorial + PO | M3: Suggested Approach and Preliminary Results  |
| 12   | Multimodal Analytics             | Tutorial + PO |   |
| 13   | Multimodal Analytics             | Tutorial + PO | M4: Mature Approach and Results with Discussion |
| 14   | White Monday                     | PO            |   |
| 15   | Bias/Fairness                    |               | Project Presentations                           |

# ML for Behavioral Data: Modeling



# SpeakUp

- **Android / iOS:**  
<http://speakup.info/>
- **Web App:**  
<https://web.speakup.info/>
- **Room number: 87475**



# Tutorial 8 Hands on

Feel free to use Noto or your own environment:

- Go to <https://noto.epfl.ch/>.
  - Login with your GASPAR.
  - If you have **NOT** already cloned the repository:
    - Go to Git → Clone → <https://github.com/d-vet-ml4ed/mlbd>.
  - Go to Git → Pull.
  - Go through [Tutorials/Tutorial08/Recommender\\_Systems\\_PartII.ipynb](#).
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**Questions?**

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# Class project milestones

- **M01** on Preferences on Tracks and Group Members
  - due **March 23, 2021 23:59 CET - MANDATORY**
- **M02** on Research Questions and Exploratory Analysis
  - due **April 13, 2021 23:59 CET - optional**
- **M03** on Implemented Approach and Preliminary Results
  - due **May 04, 2021 23:59 CET - optional**
- **M04** on Mature Approach and Results with Discussion
  - due **May 18, 2021 23:59 CET – optional**
- **Project Presentation** for Course Evaluation
  - to be given on **May 31, 2021 - MANDATORY**
- **Final Project Deliverable** for Course Evaluation
  - due **June 11, 2021 23:59 CET - MANDATORY**



# Your current idea for the project

**SpeakUp:** Which type of machine-learning approach are you planning to apply?

A: Traditional supervised learning

B: Traditional unsupervised learning

C: Knowledge tracing

D: Recommendation

E: Others



**Questions?**

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# Important upcoming dates

- Apr 23, 2021 15:00 16:00
    - Office Hour
  - Apr 26, 2021 15:15 17:00
    - Lecture #9
  - Apr 28, 2021 08:15 10:00
    - Lab Session #9
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# Your feedback is essential

- It is a new course, please give feedback on how to improve it.
- Short anonymous feedback forms on Moodle.



Quick Anonymous Feedback on Lab Session 8



<https://moodle.epfl.ch/mod/questionnaire/view.php?id=1147889>