DSI TAP 1 – Workshop 2: Supervised and Unsupervised Learning

Time:

Friday, June 18, 2021 2pm - 5 pm (3 hours)

Location:

Zoom (Link will be shared upon registration) *With your registration you agree to a planned recording of the Zoom Session.*

Registration:

Please send an e-mail to <u>tcc@cl.uzh.ch</u> to register and receive the link to the workshop. Please provide the following information:

- Name
- Department
- Your computer's operating system (e.g. Mac/Windows/Linux)
- If you have any previous programming experience
- DSI membership status

Please note that we might need to restrict the number of participants. We will give priority to DSI members and the temporal order of registrations that we receive.

Topics:

- Collocations
- Introduction to Distributional Semantics
- Dictionary-based Sentiment Analysis
- Unsupervised Machine Learning: Topic Models
- Supervised Machine Learning

Software to be installed beforehand:

- <u>R</u> with the following libraries: <u>readtext</u>, <u>quantenda</u>, <u>sentimentR</u>
- <u>Python</u> (>3.6) with the following libraries: <u>spaCy</u>, <u>pandas</u>
- <u>LightSide</u>
- <u>Mallet</u>

Note:

- If you are not sure on how to install Python and R together with the respective libraries, best follow our **step-by-step guide** (shared with you upon registration).
- If you have trouble installing any of the software, we will be available before the workshop at 1:30 pm for assistance

Detailed Schedule:

13:30-14:00	Help with Installation if needed
14:00-14:30	Timeseries / Collocations
14:30-15:00	Introduction to distributional semantics
15:00-15:30	Unsupervised Learning: mallet; stm in R
15:30-16:00	Dictionary-based sentiment detection, sentimentR
16:00-16:30	Supervised machine learning with LightSide
16:30-17:00	Supervised machine learning in R (quanteda) & Python (sklearn)

If you have no or very little experience in Python, you can find some introductory resources here: <u>https://wiki.python.org/moin/BeginnersGuide/NonProgrammers</u>