



University of
Zurich^{UZH}

Digital Society Initiative^{UZH}



ETH zürich

Call for Participants

Workshop:
Language Models in Practice

December 14 and 15, 2022

Instructor:

Felix Hamborg

Machine Learning Group, Humboldt University of Berlin

*organized by the Computational Methods Working Group (CMWG) at the University
of Zurich & ETH Zurich, Switzerland*

New analytical methods offer the possibility to process ever larger amounts of text and to measure latent constructs therein. Be it in the recognition of emotions in tweets, of political orientation in a party manifesto or the reputation of politicians in newspaper articles. At the same time, language models, such as BERT, have led to a tremendous performance increase in many natural language processing tasks. Therefore, the Computational Methods Working Group (CMWG) at the University of Zurich and ETH Zurich offers a two-day workshop on “Language Models in Practice” with Felix Hamborg (Humboldt University of Berlin) and invites early career researchers from all social sciences fields to apply. Prior general programming experience is an asset. The tutorials will be in Python, and easy-to-follow Python files will be provided to the participants; as such, at least basic programming experience in Python is required to participate in the workshop.

This two-day workshop aims to equip participants with the knowledge to employ such models in their own research. The course will strongly focus on applying current models in practice. Theoretical background knowledge will not be covered or only briefly. Instead, participants will experience and discuss real-world issues and questions they may face when applying NLP to their projects. The course will exemplarily cover (subject to minor changes): sentiment classification, translation, speech-to-text, sentence similarity & clustering, named entity recognition, document level classification, fine-tuning and testing your own classifier, including zero-shot and few-shot learning, which are useful techniques if only little training data is available. To address these tasks, we will learn how to use the HuggingFace Hub and Transformers library. A side goal of the workshop is to teach basic best practices from software development to achieve high code reusability and good maintainability. We will thus use PyCharm, an integrated development environment, and learn, for example, how to write functions and use the debugger.

Date: The workshop will take place at the UZH main building (room to be announced later) on December 14 and 15, 2022 from 9h – 18h. As the workshop will be held in person, places are limited. First come, first served.

Who can take part?

The workshop is aimed at early career researchers who work at the University of Zurich and ETH Zurich in the field of social sciences. We invite both PhD students and scholars who successfully defended their PhD within the last three years, to sign up: To register, please send an email to christina.haag@uzh.ch.

Do I have to pay a participation fee?

No, thanks to generous funding from the Graduate School of the Faculty of Humanities and Social Sciences of the University of Zurich, participation is free of charge.

About the instructor:

Felix Hamborg is a researcher in computer science focusing on natural language processing (NLP), machine learning, and how to apply methods from these fields in interdisciplinary contexts. During his Ph.D., he devised approaches for the automated identification of media bias in news articles. Since its completion, Felix has been investigating how to exploit the potential of NLP methods in further social science contexts.

What do I need to participate?

You will need a prepared computer. Due to limited time during the workshop, it will be necessary that you setup your computer prior to the workshop and verify the setup's correctness. Instructions for setting up the required software and Python packages and for verifying the setup will be sent prior to the workshop (preparation takes approximately 20-30 minutes).

Contact information of the organizing team

Computational Methods Working Group (CMWG), University of Zurich & ETH Zurich; contact: cssmethods@ikmz.uzh.ch or <http://www.cssmethods.uzh.ch>. The workshop is supported through a grant by the Graduate School at the University of Zurich and a grant by the Digital Society Initiative at the University of Zurich.