

About the Seminar

Michael Achmann-Denkler

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Introduction

The research seminar *Computational Analysis of Visual Social Media* consists of project-centred work in groups, lectures on theory and practical sessions. Each group will follow their own research interests and datasets. Groups will be formed in the third session, together with preliminary topics. We have participants from different fields, the topics will mirror this interdisciplinarity, roughly drawn from the intersections of media studies, political science, and communication science. The seminar aims at master students with first knowledge of at least one programming language.

What to Expect (Theoretical Skills)

By the end of the semester you should know more about:

- ▶ The state of Social Media Research,
- ▶ interesting questions to answer with social media data,
- ▶ ethical and legal restrictions,
- ▶ develop operationalizations for visual and textual data,

What to Expect (Practical Skills)

By the end of the semester you will be able to:

Course Plan

Table 1: Overview of our sessions

Date	Content
16.10.23	Course Organization
23.10.23	Introduction to Social Media Analysis
30.10.23	Projects & Groups, Getting Started: Tools
06.11.23	Data Collection: IG Posts & Stories
13.11.23	Data Collection: TikTok
20.11.23	Data Preprocessing: OCR & Whisper
27.11.23	Exploration of Textual Data using GPT
04.12.23	Operationalization I & Computational Text Classification using GPT
11.12.23	Data Annotation: LabelStudio & Annotation Guides
18.12.23	Evaluation I: Optimizing Text Classification
08.01.24	Exploration of Visual Data
15.01.24	Operationalization II & Computational Image Classification using CLIP
22.01.24	Evaluation II: Optimizing Image Classification