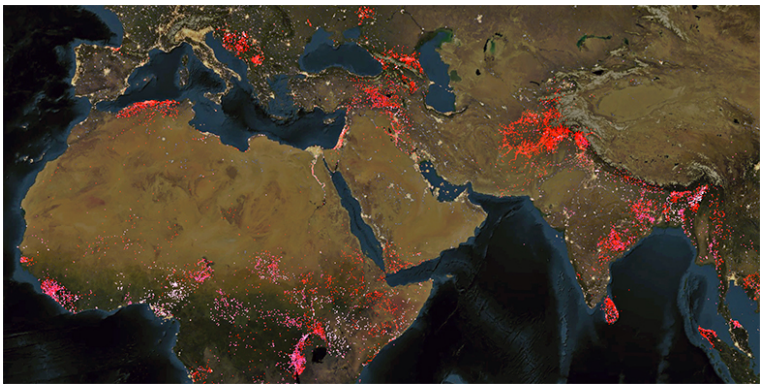
ETH
Eidgenössische Technische Hochschule Zürich
Swiss Federal Institute of Technology Zurich

Distributed Computing

Prof. R. Wattenhofer

Conflict Prediction with Social Media Data



Some countries have experienced an increase in violent conflict outbreaks over the last ten years. In these conflicts ethnic groups, local militia, terrorists as well as the state itself frequently participate. The use of social media in African countries is constantly increasing, which enables social science research to explore the online behavior of African societies.

This project will explore how Twitter data can be used to analyse and predict the outbreak of violent conflicts. The prediction task will include the exploration of state-of-the-art Natural Language Processing approaches, such as Longformers, in order to gain useful information from the large amount of tweet texts. In addition, temporal trends of Social Network Analysis features such as network positions, will be explored, in order to gain insights into the temporal development of interaction among the society on Twitter.

Requirements: Strong motivation, knowledge in deep learning, or a solid background in machine learning. Experience with PyTorch is an advantage. We will have weekly meetings to address questions, discuss progress and think about future ideas.

Interested? Please contact us for more details!

Contact

- Zhao Meng: zhmeng@ethz.ch, ETZ G61.3