Report on the outcomes of a Short-Term Scientific Mission[1]

Action number: CA21129

Grantee name: Asta Zelenkauskaite

Details of the STSM

Title: Educational video sentiment analysis over time

Start and end date: 20/01/2024 to 25/01/2024

Description of the work carried out during the STSM

The proposed project entailed a) coordination of the project activities that are needed to start collecting a new YouTube dataset; b) establishing parameters for the next steps to best serve COST OPINION broader goals. Specifically, these broader goals of the proposed short-term mission entail expanding collaborative capacity in the following ways: a) it consists of expanding collaborative project capacity between two interdisciplinary members from two COST OPINION working groups; b) composition: both members are from WG1 and WG3 that focus on the questions of data collection and extraction; both members are from Eastern European countries institutions broadly construed (Lithuania and Turkey); c) this work builds on an established collaboration in the past 6 months.

The specific scientific collaborative project entailed laying conceptual foundations on how analyse public opinion in the online commenting spaces, by focusing on sentiment and gender of the content creator. This visit was based on the premise that typically students rely on online resources to learn about new subjects to supplement higher education. To gauge this assessment, we focused on how to a) create a meaningful sample from Youtube videos; b) how to work on comments as ways to analyse public perceptions of audiences about the videos.

The first goal was to exchange know-how in social science and computer science traditions when it comes to OPINION research. This goal was achieved by setting up meetings on the topic and involving graduate students to brainstorm about the problem-solution frameworks. In addition, the proposed short-term mission has two broader goals: a) build interdisciplinary collaborative research capacity in OPINION research; and b) strengthen institutional awareness of OPINION research. With these two broader goals in mind, meeting with colleagues with interdisciplinary backgrounds who work on somewhat related topics took place. In addition, the

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visiting party Asta Zelenkauskaite met the dean of the Faculty of Arts and Social Sciences and on 1/24/2024 gave the seminar presentation at FASS-FENS, as part of the interdisciplinary seminar series entitled "Value of user-generated content: analysing emergent practices online." Students and faculty from the interdisciplinary computational social science lab attended and actively engaged in a discussion on the topic.

Description of the STSM main achievements and planned follow-up activities

The proposed project has successfully completed the coordination of activities necessary to initiate the collection of a new YouTube dataset. Additionally, parameters for the next steps have been established, aligning with COST OPINION's broader goals. The short-term mission has achieved two overarching objectives: First, it has enhanced interdisciplinary collaborative research capacity in OPINION research, and second, it has strengthened institutional awareness of OPINION research. Building upon the accomplishments of the past six months, during COST OPINION meetings, we initiated discussions about collaborative opportunities to fulfil the overarching goal of fostering interdisciplinary collaboration in OPINION research, integrating social science and computer science research.

Specifically, to start a collaborative relationship that allows for the parties to benefit from the research by mentoring graduate students, during the visit a meeting with M.A. students was set up to discuss the projects. We have also started working on a collaborative project that involves leveraging institutional know-how, notably through mentoring graduate students. In addition, during meetings with a Ph.D. student working on the project and with the host to discuss possible scenarios for dataset building.

During the visit, we worked on the following steps needed to start sentiment analysis parameters. We have discussed various challenges that the publicly available videos pose for sampling. While we are interested in publicly available comments on educational YouTube videos, creating baselines for the sampling of the videos is the first challenge due to the ranking algorithm. We have created a list of scenarios on how event-specific approaches (data-driven approaches and/or top-down expectations; e.g., pre-COVID-19 videos vs. post-COVID-19 video comment analysis) could facilitate the data collection. We have created three possible scenarios to account for possible random video sampling and set foundations to start testing the feasibility of these approaches. During the presentation, the host and the visiting party Asta Zelenkauskaite acknowledged the support from COST Opinion.