

Success Story

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Industrial HPC Course



EURO

SUCCESS STORY IN DOMAIN: SOCIAL SCIENCE APPLICATION

MEMO98 is a non-profit non-government organisation that has been monitoring the media in context of elections and other events for more than 20 years, and has carried out its activities in more than 50 countries. Recently, the organisation has also been dealing with the impact of social media on the integrity of electoral processes.

THE PROBLEM

To evaluate the use of stereotypes and misinformation against women, whether in the context of anti-Western and anti-American sentiment, or in the context of coordinated campaigns against prominent politicians and journalists, and to determine to what extent the attackers are connected to those spreading pro-Kremlin narratives.

THE SOLUTION

We have developed a custom script in the Python programming language for processing the obtained data so that we can further analyze them. To track the spread of keywords within groups or pages, we used the open-source network mapping tool Gephi. The main outcome was a network map – an interactive diagram allowing to search, cluster and analyze the spread of specific terms and web addresses.

THE HPC PROBLEM DOMAIN

Social media data was collected using CrowdTangle (a Facebook-owned social media analysis tool). The number of posts interactions of candidates and individual political parties on Facebook alone was 1.82 million. Prior to the start of this project, MEMO98 had no experience with using tools for big data processing and analysis.

THE BENEFITS

Network graphs could also be used to identify:

- which accounts shared certain URLs the most,
- which URLs were shared most often between these accounts,
- which accounts shared content with each other the most

As part of the project, NCC provided individual training to the MEMO98 team so they can work independently with this solution in the HPC environment in the future.

SUCCESS STORY DETAILS

HPC provider: CC SAS
HPC domain expert: CC SAS
Country: Slovakia
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