Ewelina Gajewska

I have completed a master's degree in cognitive science at Adam Mickiewicz University in Poznań, Poland. I was a student research assistant in a National Science Centre funded project (SONATA 16 program) working on computational pathos during my master's studies. I am also a research assistant in international projects (CHIST-ERA, VW foundation (VolkswagenStiftung)) focusing on analysis of conflict and polarisation in social media in the Laboratory of The New Ethos at Warsaw University of Technology. My research interests centre around computational social science combining natural language processing techniques and theoretical background of social science.

Skills

Python programming language

machine learning: transformers tensorflow

data preprocessing: numpy pandas

statistical analysis: statsmodels sklearn

data visualisation: seaborn streamlit

graph analysis: networkx

natural language processing: spacy nltk

R programming language

basic statistical analysis

Experience

Laboratory of the New Ethos / Research Assistant
Oct 2022 - Present, Warsaw University of Technology

Interventions against polarisation in society for TRUSTworthy social media: From diagnosis to therapy – project funded by a program of **CHIST-ERA** (Future and Emerging Information and Communication Technologies).

Tasks: Trust analytics: collection of data from social media platforms; detection and analysis of public enemies and authorities in the context of COVID-19 vaccination and climate change; network analysis of community building around common enemies and fellows; development of Transformer-based ethos detection tools for analysis of polarisation in social media; statistical analysis of rhetorical strategies (behavioural tendencies) of polarising versus non-polarising users; linguistic analysis of the language of polarisation.

Laboratory of the New Ethos / Research Assistant
May 2021 - Present , Warsaw University of Technology

Deliberation Laboratory project of the German VW foundation (**VolkswagenStiftung**) in online public discourse.

Tasks: Analysis of conflict rhetoric in public discourse – annotation of data resources with rhetorical strategies (logical arguments, appeals to pathos, attacks and supports of ethos); analysis of argument building on

social media; design of argument analytic tools with the use of Argument Interchange Format (AIF) graph structure and Python implementation.

Faculty of Psychology and Cognitive Science / Student Research Assistant

Sep 2021 - Aug 2023, Adam Mickiewicz University

Computational Pathos: Towards the new model of pathos for computational rhetoric – project funded by the SONATA 16 program of the Polish **National Science Centre** (NCN).

Tasks: Analysis of emotions in political argumentation using computational linguistics. Development of tools for lexicon-based analysis of appeals to emotions for Polish language (a publicly accessible sentiment analysis tool). Development of Transformer-based detection of sentiment in informal text for Polish and English. Design and statistical analysis of psychology studies.

Education

Adam Mickiewicz University / Master's Degree

2021 - 2023 Cognitive Science

Thesis: *Developing Human-centred Models for Improved Recognition of Emotions in Text.*

Adam Mickiewicz University / Bachelor's Degree

2018 - 2021 Cognitive Science

Awards

Award for scientific activity during master's studies

2021 / 2023

Headmaster scholarship

2019 / 2020