The term "fake news" is an expression commonly used to describe an information published in the media that is based on falsehood or manipulation as a result of deliberate disinformation activities aimed at achieving political or material benefits or in the form of shaping the desired social perception of certain phenomena. Although examples of successful disinformation campaigns have been known from antiquity, it was only the rise of internet technologies and social media that gave the term "fake news" its modern connotations, associated with the lightning speed with which such information can be created, reproduced and absorbed by the public. An important element of "fake news" is often a co-occurring graphic element, e.g. in the form of a digitally modified photo (e.g. adding weapons to protesters equipped only with banners in the original picture) or a photo presented in a context different from the original one (riots from another place and time presented as an illustration of the ongoing peaceful protests). Research shows that photos play a key role in how we evaluate the information that accompanies them. In one of the experiments it was shown that the mere presence of a photo has a positive effect on the subjective assessment of the truthfulness of the text header, even if the photo is completely unrelated to it, or if the header is clearly false. We also know from other analyzes devoted to the issue of "fake news" that the information most readily and fastest disseminated is rich in highly emotional content, in the form of, for example, headlines full of strong adjectives or properly edited silhouettes of characters. The relationship of emotional arousal caused by a given photo is also known at the moment, and a greater tendency to judge it as real.

The proposed grant project aims to investigate the problem of manipulation with the use of photographic materials in more detail, in particular in the case of reportage photos, which are often present in press reports. The innovativeness of the project will mainly consist in taking up the problem of distinguishing the type of content presented in the photos, which contributes most to the assessment of the photo as real or as a result of manipulation. The main pragmatic effect of establishing the above will be the ability to indicate which type of photos have the greatest persuasive power, and therefore are also associated with the greatest risk of becoming an element of manipulation or disinformation campaign. Due to the fact that the essential part of the research will be experiments with the use of an eye tracker, the detailed attention mechanisms related to focusing on photographs will also be examined (e.g. in the form of measuring the time that the subjects spend on viewing certain elements of photos), which will allow for a precise analysis of the relationship between the time we spend on viewing photos, the clarity of certain types of content and their tendency to attract our attention, and the reliability of the material viewed. The simultaneous measurement of indicators of emotional arousal, such as pupil size or galvanic skin reaction, will also help to confirm the hypothesis about the relationship of high emotional marking of photos with their subsequent evaluation. The experimental research with the use of the eye tracker and physiological measurement tools, which is of key importance for the project, will be preceded by a large sample of online research, the purpose of which will be to precisely identify the categories of photos that are important in terms of content.