## Abstract

This thesis focuses on the use of artificial intelligence in photojournalism. Its goal is to explore which tasks could be performed by this technology and how it could streamline journalist's work. The research method is grounded theory that was formulated based on findings from research – practices of pressrooms and their attitudes towards technologies. The initial part of the paper therefore examines specific tools and tasks that artificial intelligence could do in practice. This is done by collecting data from representatives of the largest Czech media houses, technology journalists, press agencies and representatives of photo banks. Secondary sources for research were academic work as well as popular-science resources. From these areas, the discussion proceeds to investigation and analysis of findings about the possibilities of working with images, from managing photo archives and video archives and automatic data retrieval, to machine vision or even generating of an original illustration photo based on selected parameters. This provides a foundation for further discussion on a set of upcoming tools that could make journalists' job easier, especially with regard to the ever-increasing demand for speed, accuracy and quality of news reporting. With that, the paper proceeds to analyse management of newsrooms and other creators of media content, and their position and preparedness for the introduction of new technologies, as well as their plans and investments in innovation. Final part of the discussion shifts focus to potential challenges related to work of technology journalists: technological education, correct interpretation of acquired data, combating misinformation, working with primary resources and ethical issues associated with photojournalism.