Research directions of Elena Fedorovskaya

My scholarly focus is in the area of human-centered imaging and cross media communication. I am interested in how human perception, behavior and preferences are involved in obtaining, evaluating and using various forms of media content- print, electronic, web, and social. How to integrate different media channels and enable a high-quality user experience – is one of the questions I ask. I work on these projects together with graduate and undergraduate students from multiple disciplines.

Currently, several projects are being conducted in my lab:

Media Color analysis for printing and publishing with the focus on color management and other aspects of color reproduction in media. Here I closely collaborate with Robert Chung, SMS Professor Emeritus, and industry leaders – print color management experts David Hunter and Pierre Urbain (Chromachecker) and Don Hutcheson (Idealliance G7 expert).
I am also leading an RIT effort related to the "**Consistent color appearance in a single medium**" project under CIE Technical Committee 16, Division 8.
Together with graduate students we conduct experiments on **Color Saliency** in visual media using psychophysics and eye tracking.

Media Integration in publishing. The project activities involve understanding and developing concepts for publishing and news media communications across different media channels using user centered approach. We developed a prototype for the **Transmedia publishing system using augmented reality**. The prototype was used for "Generosity of Strangers" publication by Professor Meredith Davenport and students.

Media aesthetics and appreciation. The project involves research and advising to study the influence of visual media: page layout, image characteristics on quality of user experience dimensions, persuasion techniques. I am interested to understand patterns of viewing behavior to reflect aesthetic qualities of visual media. In the **Gaze and Art** project we use eye tracking to study patterns of viewing behavior while experiencing visual art to differentiate gaze patterns of experts and novices. The goal we would like to achieve is to develop technology to assist novices with visual media appreciation and utilize principles we uncover in visual media communication design.