Eye-tracking in practice: the EyeTrackR R package and its use in a study on human postures

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Abstract

Eye tracking has been used in many scientific fields, such as behavioral sciences, education, marketing, and sports. Visualization usually plays an important role in the analysis of eye tracking data. In this presentation, I will first introduce the EyeTrackR R package that was developed for processing and visualizing eye tracking data from people looking at scientific posters. I will then present our first results of a study that tries to determine where people are looking when ranking the stability of a model holding certain postures. A portable eye-tracker is used to record the original video data of people looking at human postures. Image processing is used to extract statistical information from the video data.

This is joint work with Chunyang Li, Boyu Zhang, Eric McKinney, and Breanna Studenka.