Question Bias in Repetitive Crowdsourcing Tasks

Master’s Thesis Proposal

Problem Description

Crowdsourcing is an expression that refers to solving tasks by employing humans. These tasks usually are more intuitive to solve for humans than they are with state-of-the-art computers: Currently, image classification and identification, as well as translation are common on-demand crowdsourcing objectives. This thesis will explore whether there exists question bias, i.e., whether the repetitive execution of a task causes a bias in the answers of the crowd. Imagine a worker who has been classifying images for a few minutes where all images depicted the Golden Gate bridge similar to the picture shown in Fig. 1. If the worker is then presented with an image that shows the 25th of April bridge in Lisbon (designed by the same architect as the Golden Gate bridge and shown in Fig. 2), he might make a mistake in answering the question due to his repetitive and thus at this point ingrained decision behavior. To examine this problem, the student will

- determine scenarios where question bias may occur.
- design and execute experiments that will show whether there exists in fact question bias.
- theoretically model and evaluate the results found during the experimental phase of this project.

Contact

If you are interested in this project or have ideas for a similar project, please contact Anja Gruenheid (anja.gruenheid@inf.ethz.ch). This project will be supervised by Prof. Kossmann.