

Presentation

Deepanwita Datta, Manajit Chakraborty, and Aveek Biswas

Your Click Matters: Enhancing Click-based Image Retrieval Performance through Collaborative Filtering

Abstract:

Image retrieval has been an active research area since the early days of computing. While ensemble, multimodal and hybrid methods coupled with learning has seen an upward surge replacing unimodal, heuristic-based methods; a rather new offshoot has been to identify new features associated with images on the web. One such feature is the 'click count' based on the clicks an image or its corresponding text gets in response to a query. Previous state-of-the-art methods have tried to exploit this feature by using its raw count and machine learning. In this paper, we build on this idea and propose a new collaborative filtering based technique to employ the click-log of users from the web to better identify and associate images in response to either a text or an image query. Experiments performed on a large scale publicly available standard dataset having genuine click logs from actual users corroborate the efficacy and significant increase in efficiency of our approach.

Biography: Deepanwita Datta completed her Ph.D. at the Department of Computer Science and Engineering at Indian Institute of Technology (BHU), Varanasi in 2018. Her thesis was on Multimodal Information Retrieval.

Manajit Chakraborty is a PhD student at the Faculty of Informatics, University of Lugano. Manajit does research in Information Retrieval, Text Mining and Social Network Analysis.

Aveek Biswas is a Master's student in Computer Science at the University of California, San Diego. His research interests include Machine Learning and its applications in Computer Vision.

Organization: Norwegian University of Science and Technology, Università della Svizzera italiana, and University of California San Diego

Contact: ddatta.rs.cse13@itbhu.ac.in, chakrm@usi.ch, a4biswas@ucsd.edu