

# Video Browser Showdown

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## Project Description

Media collections are becoming a central information resource for a growing number of domains. This calls for very effective tools for not only finding content in those collections, but also gaining insights into the collections and analyzing them.



Search and browsing tools are ubiquitous, but they offer no support for insight and analysis, so what is clearly needed is a new approach to browsing media collections. Such an approach has immediate application in diverse domains, including professional media management, digital heritage, media forensics, and personal media browsing.

In previous work, we proposed a new data model for photo browsing, which builds on and combines aspects of multi-dimensional analysis and faceted search to get the best of both worlds [1]. Furthermore, we implemented a prototype media server (ObjectCube) and photo browser (PhotoCube) to demonstrate the concepts in practice [2]. Most recently, a JS-based browser was added to the collection, and a VR-based client is also in development. Until now, the focus has been on image retrieval.

In this project, we propose to develop new versions of the C++-based media server and JS-based media browser. The goal is to expand the data model to videos and improve the performance sufficiently to take part in the [Video Browser Showdown](#).

The project is suitable for 2-3 well-qualified MSc students. The intention is to take part in the Video Browser Showdown the year after the project, which includes an international publication. And the presentation of the project should be quite interactive!

## References

- [1] Björn Þór Jónsson, Grímur Tómasson, Hlynur Sigurpórsson, Áslaug Eiríksdóttir, Laurent Amsaleg, Marta K. Lárusdóttir. [A Multi-Dimensional Data Model for Personal Photo Browsing](#). In Proceedings of the International Conference on MultiMedia Modeling (MMM), Sydney, Australia, January 2015.
- [2] Grímur Tómasson, Hlynur Sigurpórsson, Björn Þór Jónsson, Laurent Amsaleg. [PhotoCube: Effective and Efficient Multi-Dimensional Browsing of Personal Photo Collections](#). In Proceedings of the ACM International Conference on Multimedia Retrieval (ICMR), Trento, Italy, April 2011.