

The subject of this bachelor thesis is to design and create a web portal, enabling efficient indexing and content-based searching of images obtained from various free image databases (e.g., results from a keyword-based search engine). The portal provides fast feature extraction technique and for the visual similarity, the signature quadratic form distance is utilized. The search supports various user settings and comparison of their results. Search results can also be presented using a layout based on particle physics, which supports exploration and multi-query.