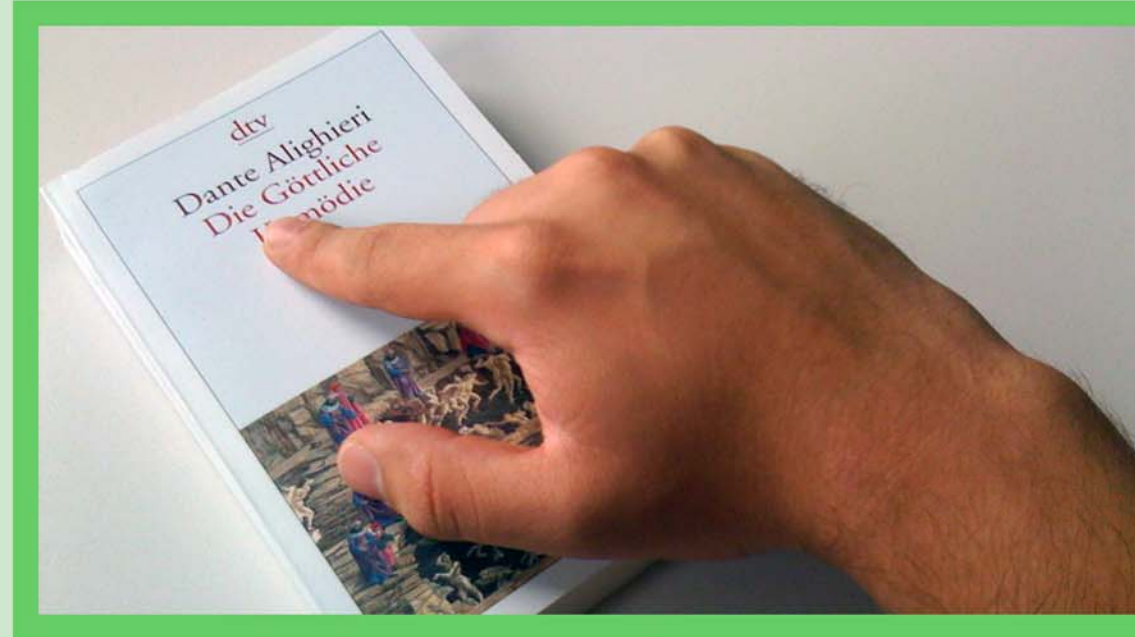


Mobile Projector-Camera System Based Interaction Technique for Annotating Physical Information Resources

Motivation



Looking for the right information in large amounts of **physical information resources** can easily become a chore.



Natural kinetic and manipulative **interaction** underlay the process of working with a physical medium.



Annotating books helps to create meta data and to provide search or cross referencing functionalities.

Concept

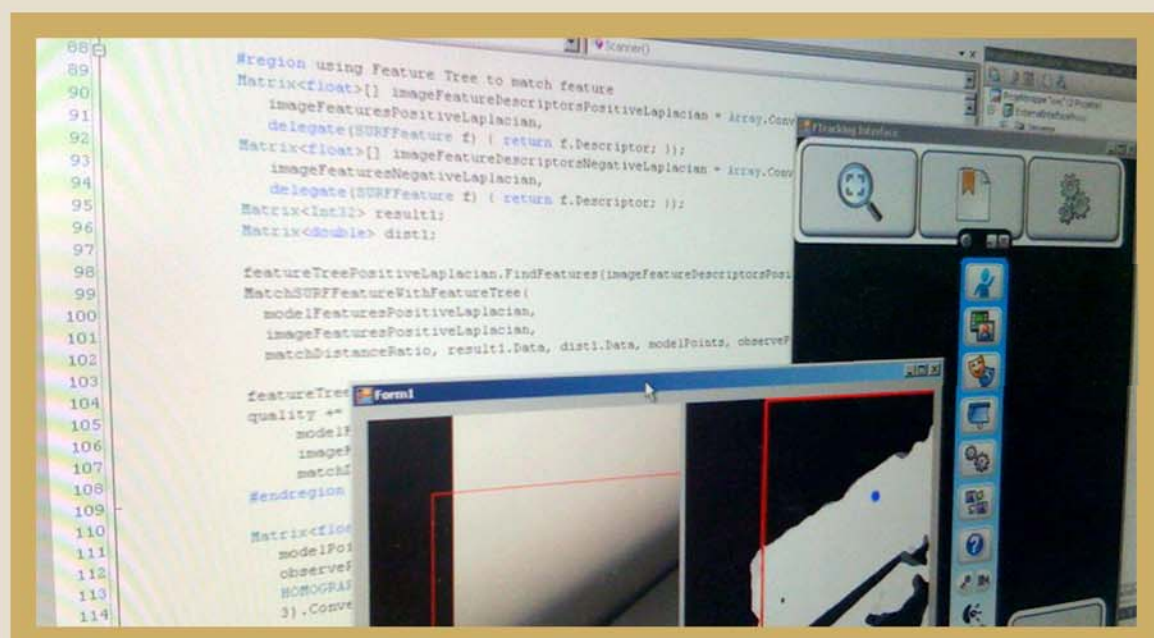


Creating a **mobile** and ubiquitous device supports individual working styles in a beneficial manner.



Using a device like a **flashlight** provides seamless integration of meta data by pointing at an object of interest.

Implementation



Recognition and Processing is based on OpenCV using Speeded Up Robust Features and Motion Tracking.



Assembling of a projector-camera system creates a mobile augmented interface to annotate physical media.



Looking for the right information in large amounts of physical information resources, e.g. books or magazines can easily become a chore. If we can convince readers to tag books with meta data, we could easily provide functionalities like searches and cross references.

In this demo we present a new interaction concept and its implementation to annotate physical information resources with meta data. We have designed a projector-camera system that can be used like a reading lamp projecting an annotation interface, integrating physical objects into it and recognizing simple gestures to control an application.

The reader holds the projector-camera system like a flashlight in his hand next to his head and points to the object of interest. The tagging interface is projected next to the book, giving the opportunity to annotate with the other hand.

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