Automatic Content Based Image Organization and Ranking on Mobile devices

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Abstract

The usage of mobile phones and tablets have increased rapidly over the past decade. The mobile devices are equipped with high quality cameras for the purpose of taking images and videos. It is common to have thousands of images in a mobile device, and it is cumbersome to manually organize the images based on its content and decide whether an image is of good quality or not. Hence it is important to automatically organize and rank the images based on its content. In this paper we develop a mobile application to organize images based on, (i) the facial feature information of the users, (ii) computer generated images meme versus images taken from a camera. Our application will also rank images based on a no-reference blur metric and decide whether the image is of good quality or not. We evaluate the feasibility of executing the state of the art no-reference blur estimation methods on a mobile device in real time. We also evaluate the performance of the no-reference blur estimation methods on the state of the art image resolutions. We intend to develop a fast no-reference blur estimation method using integral images and by varying the image resolution for real time blur estimation on mobile devices.