Abstract

Modern handheld devices like mobile phones and tablets feature two digital cameras - one in the front and one at the back. Though the back camera (which is of higher resolution and quality) is used for general purpose photography, under certain specific conditions the photographs taken are of unacceptable quality. This paper describes an efficient utility of the dual cameras to produce good quality still photographic pictures making use of hardware features provided by the camera controller and the SoC in cases where normal photography through the single camera does not produce good results. In the absence of a sophisticated image processing/editing software in mobile devices, this technique provides an easy way to create those effects in minimal time with less power by processing the foreground and background images obtained from the two cameras separately and then blending the two. Experimental results provided at the end of the paper show promising results.
Efficient Utility of Dual Cameras in a Mobile Device

Reference

- Pasricha, N. A Professional's Basic Photography. Black Rose Publications.

Index Terms

Computer Science  Image Processing

Key words

Dual camera  image
processing  mobile device