

Long exposure handheld photography is coupled with the problem of blurring, which is difficult to remove without additional information. The goal of this work was to utilize motion sensors contained in modern smartphones to detect exact motion track of the image sensor during the exposure and then to remove the blur from the resulting photograph according to this data.

A system was proposed which performs deconvolution using a kernel from the recorded gyroscope data. An implementation on Android platform was proved on a test smartphone device.