Mobile Computational Photography

Mobile devices are the next front of computational devices, for many people especially in the developing world a mobile phone is their first computer. Most of these mobile computers have also a camera of increasing quality and image resolution. Camera phones have some challenges compared to professional cameras, both the sensors and optics are necessarily smaller, but by adding computation to the image capture it is possible toincrease the image quality and create novel applications that are not even possible on traditional cameras. In this talk we will see several mobile computational photography applications, as well as a proposal for a new API and architecture for computational cameras.