Superresolution imaging - from equations to mobile applications

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In the last five years we have witnessed a rapid improvement of methods that perform image restoration, such as, denoising, deconvolution and superresolution. We will provide a brief mathematical background to superresolution as an optimization problem and summarize our contribution. Specifically, we will talk about robustness to misregistration, an extension to space-variant cases and a fast converging method of augmented Lagrangian suitable for constrained optimization problems. We will also give an overview of our past and ongoing commercial applications in which superresolution plays a key role.

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