Stanley J Osher* (sjo@math.ucla.edu), Mathematics, UCLA, 520 Portola Plaza, Los Angeles, CA 90272. New algorithms in information science.

The past few years have seen an incredible explosion of new (or revival of old) fast an effective algorithms for various imaging and information science applications. These include: nonlocal means, compressive sensing, sparse reconstruction, L1 and TV minimization, as well as relatively old favorites such as the level set method and PDE based image restoration. I'll give my view of where we are and where we are going, hopefully giving credit to all the people involved. (Received August 09, 2010)