

Contents

1	Introduction to Compressed Sensing and Sparse Filtering	1
	Avishy Y. Carmi, Lyudmila S. Mihaylova and Simon J. Godsill	
2	The Geometry of Compressed Sensing	25
	Thomas Blumensath	
3	Sparse Signal Recovery with Exponential-Family Noise	77
	Irina Rish and Genady Grabarnik	
4	Nuclear Norm Optimization and Its Application to Observation Model Specification	95
	Ning Hao, Lior Horesh and Misha E. Kilmer	
5	Nonnegative Tensor Decomposition	123
	N. Hao, L. Horesh and M. Kilmer	
6	Sub-Nyquist Sampling and Compressed Sensing in Cognitive Radio Networks	149
	Hongjian Sun, Arumugam Nallanathan and Jing Jiang	
7	Sparse Nonlinear MIMO Filtering and Identification	187
	G. Mileounis and N. Kalouptsidis	
8	Optimization Viewpoint on Kalman Smoothing with Applications to Robust and Sparse Estimation	237
	Aleksandr Y. Aravkin, James V. Burke and Gianluigi Pillonetto	
9	Compressive System Identification	281
	Avishy Y. Carmi	
10	Distributed Approximation and Tracking Using Selective Gossip	325
	Deniz Üstebay, Rui Castro, Mark Coates and Michael Rabbat	

11	Recursive Reconstruction of Sparse Signal Sequences	357
	Namrata Vaswani and Wei Lu	
12	Estimation of Time-Varying Sparse Signals in Sensor Networks.	381
	Manohar Shamaiah and Haris Vikalo	
13	Sparsity and Compressed Sensing in Mono-Static and Multi-Static Radar Imaging	395
	Ivana Stojanović, Müjdat Çetin and W. Clem Karl	
14	Structured Sparse Bayesian Modelling for Audio Restoration . . .	423
	James Murphy and Simon Godsill	
15	Sparse Representations for Speech Recognition	455
	Tara N. Sainath, Dimitri Kanevsky, David Nahamoo, Bhuvana Ramabhadran and Stephen Wright	