Sparse Representations for Radar with MATLAB® Examples

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SYNTHESIS LECTURES ON ALGORITHMS AND SOFTWARE IN ENGINEERING #10

MORGAN & CLAYPOOL PUBLISHERS

ABSTRACT

Although the field of sparse representations is relatively new, research activities in academic and industrial research labs are already producing encouraging results. The sparse signal or parameter model motivated several researchers and practitioners to explore high complexity/wide bandwidth applications such as Digital TV, MRI processing, and certain defense applications. The potential signal processing advancements in this area may influence radar technologies. This book presents the basic mathematical concepts along with a number of useful MATLAB® examples to emphasize the practical implementations both inside and outside the radar field.

KEYWORDS

radar, sparse representations, compressive sensing, MATLAB®

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