Abstract

This paper proposes a methodology to design filters that extract information from noisy signals. From a mathematical point of view, a method is used based on homogeneous polynomially parameter-dependent (HPPD) matrices of arbitrary degree. The optimal filter is then obtained by solving a convex optimization problem using off-the-self software. To show the effectiveness of the proposed filter design methodology some examples are solved, and the solution is illustrated using computer simulations.


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\textbf{Index Terms}

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\textbf{Keywords}

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