

ITERATIVE DETECTION

Adaptivity, Complexity Reduction, and Applications



by
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Iterative Detection

Mike Jess

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engineers and students working in the field of detection and estimation. It will be of particular interest to those who would like to learn how iterative detection can be applied to equalization, interference mitigation and general signal processing tasks. Researchers and practicing engineers interested in learning the turbo decoding algorithm should also have this book.

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IEEE Circuits & Devices, 2002 **Quasi-Maximum-likelihood Detection in Digital Communications** Mikalai Kisialiou, 2007 On Iterative Detection for Channels with Memory Gianluigi Ferrari, Università di Pavia, 2001 Proceedings, 2006 Conference Record, 2001 Conference Proceedings, 2004

Bayesian Inference and Maximum Entropy Methods in Science and Engineering Ali Mohammad-Djafari, 2006-12-13 The MaxEnt workshops are devoted to Bayesian inference and maximum entropy methods in science and engineering. In addition this workshop included all aspects of probabilistic inference such as foundations, techniques, algorithms and applications. All papers have been peer reviewed.

Dissertation Abstracts International, 2008 Journal of Southeast University, 2007 Annales des télécommunications, 2006 **International ITG Conference Source and Channel Coding**, 2004 Recommended Promotions to the Ranks of Professor and Associate Professor University of Michigan. Office of the Provost and Vice President for Academic Affairs, 2005 Technical Program Conference Record, 2002 Detection and Modeling of 2-dimensional Signals Marcus Marrow, 2004

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