

Bayesian Phase Unwrapping with Factor Graphs

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Markov Random Fields and Factor Graphs

What is an MRF? Where are they used?

Factor Graphs for Low-Level Vision

Properties of image MRFs large number of vertices $O(1)$
(constant local) connectivity

MRFs for Phase Unwrapping

Two views on our MRF

Markov-Chain Monte Carlo

Metropolis Hastings

Gibbs Sampling

Tempering

Swendsen-Wang

MRFs and Parallelism

2-D Synthetic Data

3-D Synthetic Data

Div and Audrey

PRELUDE

Where to now?