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of Scientific Data
combines stochastic
modeling and
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in a variety of
standard and less
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random fields and
hidden Markov
models in a clear,
thoughtful and

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succinct manner.

The distinguishing feature of this work is that, in addition to probability theory, it contains statistical aspects of model fitting and a variety of data sets that are either analyzed in the text or used as exercises. Markov chain Monte Carlo

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methods are introduced for evaluating likelihoods in complicated models and the forward backward algorithm for analyzing hidden Markov models is presented. The strength of this text lies in the use of informal language

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models, and present
an extended
discussion on the
analysis of
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reliability and other
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such as branching,
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new chapter
describing Brownian
motion, where the

outcomes are
continuously
observed over
continuous time, is
included. Further
applications, worked
examples and
problems, and
biographical details
have been added to

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this edition. Much of
the text has been
reworked. The

appendix contains
key results in
probability for
reference. This
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computer simulation,
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