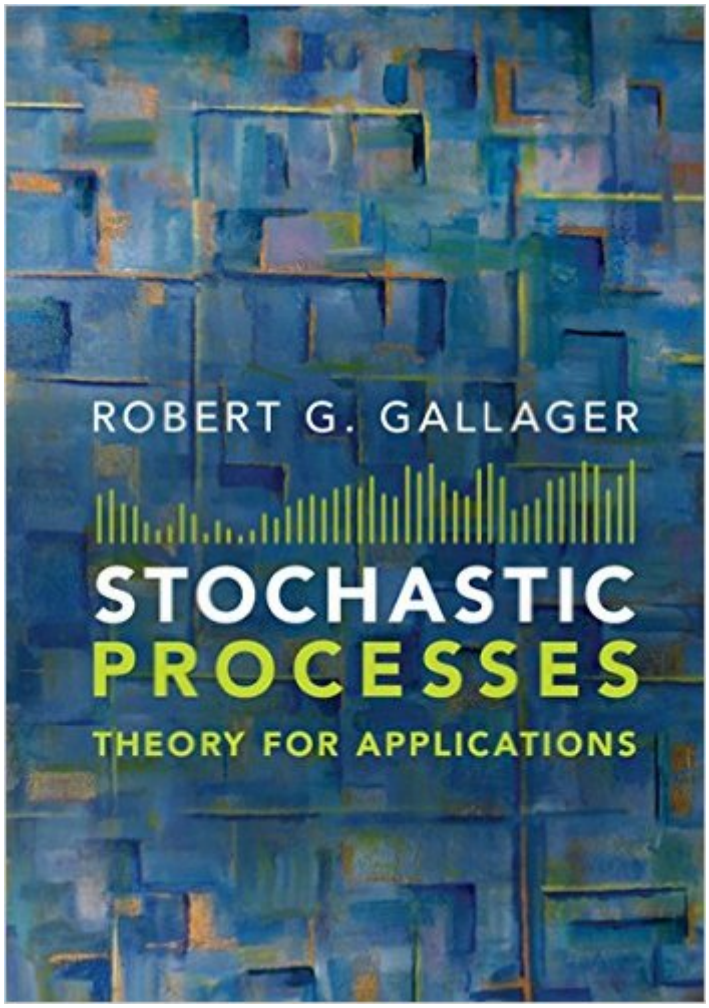
Stochastic Processes: Theory For Applications



Synopsis

This definitive textbook provides a solid introduction to discrete and continuous stochastic processes, tackling a complex field in a way that instils a deep understanding of the relevant mathematical principles, and develops an intuitive grasp of the way these principles can be applied to modelling real-world systems. It includes a careful review of elementary probability and detailed coverage of Poisson, Gaussian and Markov processes with richly varied queuing applications. The theory and applications of inference, hypothesis testing, estimation, random walks, large deviations, martingales and investments are developed. Written by one of the world's leading information theorists, evolving over twenty years of graduate classroom teaching and enriched by over 300 exercises, this is an exceptional resource for anyone looking to develop their understanding of stochastic processes.

Book Information

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Average Customer Review: 5.0 out of 5 starsÂ Â See all reviewsÂ (4 customer reviews)
Best Sellers Rank: #317,850 in Books (See Top 100 in Books) #20 inÂ Books > Science & Math > Mathematics > Applied > Stochastic Modeling #42 inÂ Books > Engineering & Transportation > Engineering > Telecommunications & Sensors > Signal Processing #585 inÂ Books > Engineering & Transportation > Engineering > Electrical & Electronics > Electronics

Customer Reviews

Stochastic Processes: Theory for Applications is very well written and does an excellent job of bridging the gap between intuition and mathematical rigorousness at the first-year graduate engineering school level. The book is a combination of the material from two MIT courses: (6.262) Discrete Stochastic Process and (6.432) Stochastic Processes, Detection, and Estimation. Because of this, the book shares much in common with Prof. Gallager's previous textbook: Discrete Stochastic Processes (ISBN-13: 978-0792395836 published 1995). I would not recommend to those interested only in this sub-topic - and who already own DSP - to purchase this new textbook as not

much new will be gained. Nevertheless, the new inductee into the stochastic process world will be well served by this excellent update.

The best intro to stochastic processes available, bar none [and I have seen a lot of them] - also a companion to his GREAT, FREE course on the MIT Open Course website. If you buy this book, plan to do the course - if you don't you are missing out on a massive amount of information.

A calm and enjoyable read. Pairs well with a good glass of wine. I prefer red, but Iâ ™m sure white would work as well.

Great book!!

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