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# Synthesis Digital Library of Engineering and Computer Science

# 使用簡介

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M&C出版社崛起於2005年,致力於工程學與電腦資訊科學的研究、發展及教育,是一個 創新的電子資源,集結來自國外知名大學教授的課堂講義及手稿,讓您身在台灣就可以親 受大師的薰陶。內容皆出於專家獨特的見解,並且出版快速,讓讀者獲得比電子期刊更新 穎更精闢的內容與分析,頁數介於100頁-200頁,與傳統紙本、電子參考資源、電子期刊 或電子專題論文相較下更多了優越的時效性與功能性。

目前Collection 1已完整出版,共有100個titles,2008年將陸續出版Collection 2,預計包含125個titles。

# ■ 資料庫首頁

連線網址: http://www.morganclaypool.com/



(2)

可選擇瀏覽最新(或即將)出版的title,或按照Series主題瀏覽,或是按照主題小專輯瀏覽

## ■ 瀏覽方式

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# Synthesis Digital Library of Engineering and Computer Science

## Complete Collection One

Title 名稱

- Adaptive Mesh Refinement for Time-Domain Numerical Electromagnetics (Sarris) Synthesis Lectures on Computational Electromagnetics
- Advanced Probability Theory for Biomedical Engineers (Enderle/Farden/Krause) Synthesis Lectures on Biomedical Engineering
- Antennas with Non-Foster Matching Networks (Aberle/Loepsinger-Romak) Synthesis Lectures on Antennas
- · Articulation and Intelligibility (Allen) Synthesis Lectures on Speech and Audio Processing
- · Artificial Organs (Miller) Synthesis Lectures on Biomedical Engineering
- Atmel AVR Microcontroller Primer: Programming and Interfacing (Barrett/Pack) Synthesis Lectures on Digital Circuits
   & Systems
- Basic Probability Theory for Biomedical Engineers (Enderle/Farden/Krause) Synthesis Lectures on Biomedical Engineering
- Bioinstrumentation (Enderle) Synthesis Lectures on Biomedical Engineering
- Biomedical Image Analysis: Tracking (Acton/Ray) Synthesis Lectures on Image, Video, and Multimedia Processing
- BioNanotechnology (Papazoglou/Parthasarathy) Synthesis Lectures on Biomedical Engineering
- A Blossoming Development of Splines (Mann) Synthesis Lectures on Computer Graphics and Animation
- Brain-Machine Interface Engineering (Sanchez/Principe) Synthesis Lectures on Biomedical Engineering
- Capstone Design Courses: Producing Industry-Ready Biomedical Engineers (Goldberg) Synthesis Lectures on Biomedical Engineering
- <u>Chip Multiprocessor Architecture: Techniques to Improve Throughput and Latency</u> (Olukotun, Hammond, Laudon)
   Synthesis Lectures on Computer Architecture

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#### Synthesis Series

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Andreas Spanias, Arizona State University

Antennas

Constantine A. Balanis, Arizona State University

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進入看同一個

主題下還有哪

些其他 title

編輯者 名稱

#### Artificial Intelligence and Machine Learning

Ronald Brachman, Yahool Research and Thomas Dietterich, Oregon State University

#### Biomedical Engineering

John D. Enderle, University of Connecticut

#### Communication Networks

Jean Walrand, University of California-Berkeley

#### Communications

William Tranter, Virginia Tech

#### Computational Electromagnetics

Constantine A. Balanis, Arizona State University

## ■ 瀏覽功能介紹

## 假設由上述方式點選一本 title 進入後,頁面如下

# Advanced Probability Theory for Biomedical Engineers Synthesis Lectures on Biomedical Engineering

2006, 108 pages, (doi:10.2200/S00063ED1V01Y200610BME011)

John D. Enderle

Program Director & Professor of Biomedical Engineering, University of Connecticut

David C. Farden

Professor of Electrical and Computer Engineering, North Dakota State University

Daniel J. Krause

Emeritus Professor of Electrical and Computer Engineering, North Dakota State University

#### Abstract

This is the third in a series of short books on probability theory and random processes for biomedical engineers. This book focuses on standard probability distributions commonly encountered in biomedical engineering. The exponential, Poisson and Gaussian distributions are introduced, as well as important approximations to the Bernoulli PMF and Gaussian CDF. Many important properties of jointly Gaussian random variables are presented. The primary subjects of the final chapter are methods for determining the probability distribution of a function of a function of a random variable. We first evaluate the probability distribution of a function of one random variable using the CDF and the PDF. Next, the probability distribution for a single random variable is determined from a function of two random variables using the CDF. Then, the joint probability distribution is found from a function of two random variables using the joint PDF and the CDF.

The aim of all three books is as an introduction to probability theory. The audience includes students, engineers and researchers presenting applications of this theory to a wide variety of problems—as well as pursuing these topics at a more advanced level. The theory material is presented in a logical manner—developing special mathematical skills as needed. The mathematical background required of the reader is basic knowledge of differential calculus. Pertinent biomedical engineering examples are throughout the text. Drill problems, straightforward exercises designed to reinforce concepts and develop problem solution skills, follow most sections.

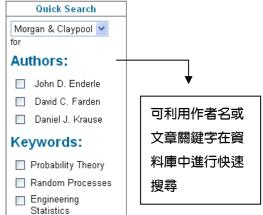


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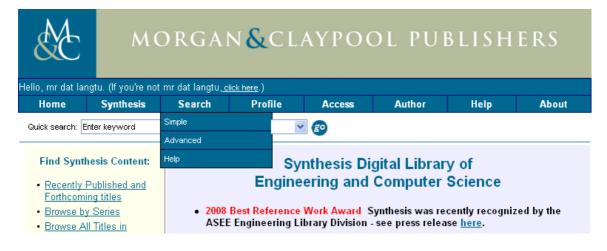
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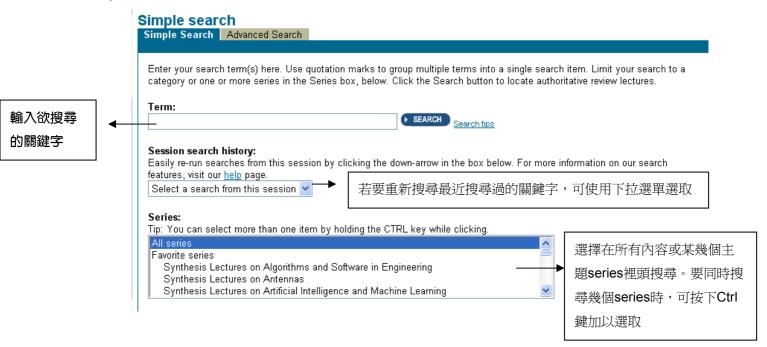
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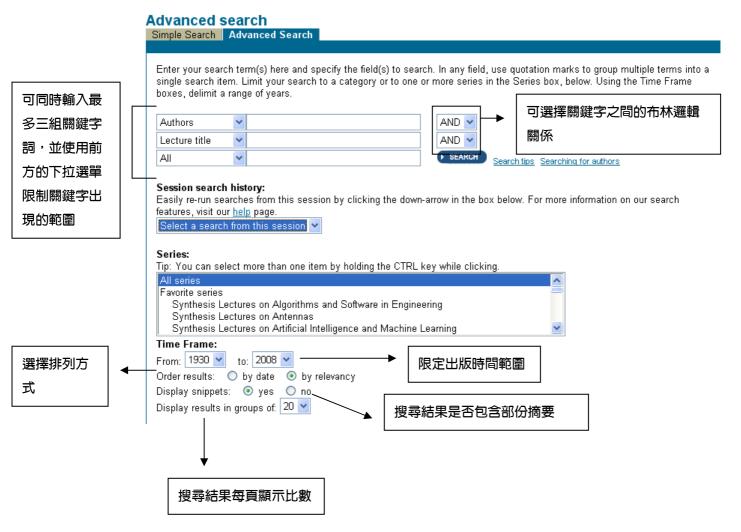
摘要

作者

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#### Advanced Search



# ■ 搜尋結果頁面

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