

Science Collection



Operating Systems: Three Easy Pieces

Author: Remzi H. Arpaci-Dusseau and Andrea C. Arpaci-dusseau

Publisher: Arpaci-Dusseau Books

Overview: Operating Systems: Three Easy Pieces (OSTEP) is a foundational computer science textbook organized around three core pillars of operating system design: virtualization, concurrency, and persistence. Developed through two decades of instruction at the University of Wisconsin Madison, the text combines theoretical abstractions such as CPU scheduling, virtual memory, thread synchronization, and file system architecture with practical C-based implementation details.

Acc. No: 103494

Call No: [005.43 ARP-O](#)



Spreadsheet Implementation Technology: Basics and Extensions

Author: Peter Sestoft

Publisher: MIT Press

Overview: It provides an architectural blueprint and computational framework for building, extending, and optimizing spreadsheet engines. Drawing on compiler theory, object-oriented design, dynamic recalculation algorithms, and bytecode compilation, Sestoft introduces two open-source platforms Corecalc (a functional core engine) and Funcalc (an extension enabling user-defined sheet functions) to demonstrate how to engineer high-performance spreadsheet software. [Read more.](#)

Acc. No: 103485

Call No: [005.54 SES-S](#)



Generative AI for Coders: Innovate Faster - Build Next-Gen Applications with AI-Generated Code

Author: Sergio Robert

Publisher: Independently

Overview: Generative AI for Coders: Innovate Faster - Build Next-Gen Applications with AI-Generated Code by Sergio Robert is a developer guide to integrating large language models (LLMs) and generative tools into the software engineering lifecycle. The book covers practical techniques for prompt engineering, AI coding environment setups, automated unit testing, refactoring, AI-assisted system design, and the ethical, legal, and security implications of AI-assisted code generation.

Acc. No: 103495

Call No: [006.31 ROB-G](#)



Introduction to Psychophysics with Python

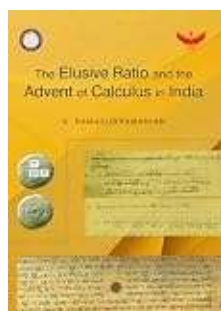
Author: Rakesh Sengupta and Maganti Madhavalatha

Publisher: River Publishers

Overview: A practical, hands-on guide that bridges classical perceptual theory from Weber, Fechner, and Stevens with modern computational experimentation. Using PsychoPy and Python, the text guides students and researchers through designing psychophysical experiments, handling stimulus-response data, and performing statistical inference, curve fitting, and bootstrapping. [Read more.](#)

Acc. No: 103344

Call No: [152.10285 SEN-I](#)



The Elusive Ratio and the Advent of Calculus in India

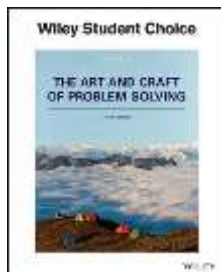
Author: K. Ramasubramanian

Publisher: Garuda Prakashan

Overview: A historical and mathematical reconstruction of the independent emergence of infinitesimal reasoning and infinite series in India across two millennia. Tracing a continuous lineage from the Vedic Śulbasūtras through Āryabhaṭa and Brahmagupta to Mādhava of Saṅgamagrāma and the Kerala School, the volume demonstrates how Indian scholars formulated foundational principles of calculus including power series expansions for pi, sine, and cosine centuries prior to Newton and Leibniz.

Acc. No: 103484

Call No: [510.954 RAM-E](#)



The Art and Craft of Problem Solving

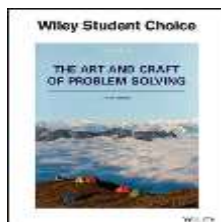
Author: Paul Zeitz

Publisher: Wiley

Overview: Paul Zeitz introduces an active, strategy-driven approach to mathematics tailored for Olympiad competitors, undergraduate majors, and independent learners. Drawing on his experience coaching the U.S. International Mathematical Olympiad team, Zeitz emphasizes heuristic investigation and active mathematical exploration over routine formulaic exercises. [Read more.](#)

Acc. No: 103395

Call No: [510.76 ZEI-A](#)



Ethology: Its Nature and Relations with Other Sciences

Author: Robert A. Hinde

Publisher: Fontana Paperbacks

Overview: Ethology: Its Nature and Relations with Other Sciences by renowned ethologist Robert A. Hinde offers a comprehensive overview of ethology, tracing its historical development, foundational principles, and core methodologies.

Acc. No: 103395

Call No: [510.76 ZEI-A](#)



In Pursuit of the Traveling Salesman: Mathematics at the Limits of Computation

Author: William J. Cook

Publisher: Princeton University Press

Overview: In Pursuit of the Traveling Salesman travels to the very threshold of our understanding about the nature of complexity and challenges you yourself to discover the solution to this captivating mathematical problem. [Read more.](#)

Acc. No: 103391

Call No: [511.5 COO-I](#)



Time and Chance

Author: David Z. Albert

Publisher: Harvard University Press

Overview: Time and Chance investigate the conflict between time-symmetric microscopic physical laws and the asymmetric macro-level direction of time. Beginning with Newtonian mechanics and statistical thermodynamics before extending to quantum mechanics, Albert introduces a rigorous account of statistical regularities, temporal irreversibility, epistemic asymmetries between past and future, and the quantum measurement problem.

Acc. No: 103349

Call No: [530.11 ALB-T](#)



The Tame and the Wild: People and Animals after 1492

Editor: Marcy Norton

Publisher: Harvard University Press

Overview: Marcy Norton provides a transformative history of the Atlantic world by placing nonhuman animals both European livestock and Indigenous "companion species" at the center of colonization. Norton demonstrates how Indigenous American practices of familiarization (taming wild species) and European animal husbandry reshaped post-1492 societies, laying the groundwork for both modern pet-keeping and zoological science.

Acc. No: 103358

Call No: [591.5094 NOR-T](#)



South Indian Butterflies: Field Guide

Author: Gunathilagaraj K, T N A Perumal and K Jayaram

Publisher: Krab Media & Marketing

Overview: Some South Indian Butterflies: A Field Guide by K. Gunathilagaraj et al. provides a comprehensive taxonomic and field-identification resource for the butterfly species of Peninsular India and the Western Ghats. The text details morphological key characteristics, host plant associations, seasonal abundance, and habitat distributions across South Indian ecosystems.

Acc. No: 103377

Call No: [595.789 GUN-S](#)



Biocomposites and the Circular Economy

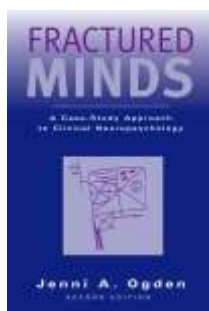
Editor: Abbas S Milani and Mahdi Takaffoli

Publisher: Woodhead Publishing is an imprint of Elsevier

Overview: Biocomposites and the Circular Economy, edited by Abbas S. Milani and Mahdi Takaffoli, presents multidisciplinary research on the full lifecycle of biocomposite materials within sustainable economic models. The volume integrates synthesis and processing techniques with techno-economic assessments, supply chain modelling, and life cycle analysis to advance bio-based manufacturing. [Read more.](#)

Acc. No: 103383

Call No: [620.118 BIO-B](#)



Fractured Minds: A case-study approach to clinical neuropsychology

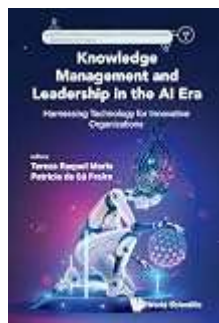
Author: Jenni A Ogden

Publisher: Oxford University Press

Overview: Jenni A. Ogden introduces the practice of clinical neuropsychology through clinical case narratives of adults with acquired brain injury and neurological disorders. Combining patient histories with empirical research, the text details the assessment, neuroanatomy, diagnosis, ethical dilemmas, and rehabilitation strategies across a spectrum of conditions from traumatic brain injury and dementia to rare agnosia's, Parkinson's disease, and Huntington's disease.

Acc. No: 103483

Call No: [616.89 OGD-F](#)



Knowledge Management and Leadership in the AI Era: Harnessing Technology for Innovative Organizations

Editor: Tereza Raquel Merlo and Patrícia de Sá Freire

Publisher: World Scientific

Overview: Knowledge Management and Leadership in the AI Era explores how organizational leaders can integrate artificial intelligence into knowledge management (KM) frameworks to enhance strategic decision-making, agility, and innovation. Combining global case studies with theoretical insights, the collection addresses regional technological adaptation, leadership strategies, dynamic KM architectures, and the operational challenges of modern digital transformation.

Acc. No: 103493

Call No: [658.4038 KNO-K](#)



Nanobiotechnology: Concepts, Applications and Perspectives

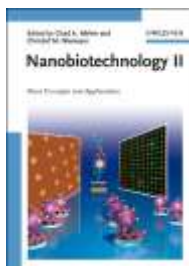
Editor: Christof M. Niemeyer and Chad A. Mirkin

Publisher: Wiley

Overview: It provides an interdisciplinary survey of the integration of biomolecular structures with nanoscale materials science. Synthesizing contributions across bioorganic chemistry, molecular biology, bioanalytic, and materials research, the text outlines key methodologies in interphase systems, protein and DNA nanostructures, and nano analytics for applications in biosensing, medical technologies, and bioelectronics. [Read more.](#)

Acc. No: 103389

Call No: [660.6 NAN-N](#)



Nanobiotechnology II: More Concepts and Applications

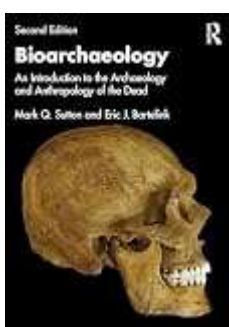
Editor: Christof M. Niemeyer and Chad A. Mirkin

Publisher: Wiley

Overview: It extends their foundational survey on the integration of biomolecular systems with nanoscale materials. Organised around four key domains nanoparticles, nanostructures and patterns, nanodevices and machines, and nano analytics this volume presents advanced methodologies and emerging technological applications in molecular engineering, diagnostics, and nanomedicine.

Acc. No: 103390

Call No: [660.6 NAN-N](#)



Bioarchaeology: An Introduction to the Archaeology and Anthropology of the Dead

Author: Mark Q. Sutton and Eric J. Bartelink

Publisher: Routledge,

Overview: Bioarchaeology: An Introduction to the Archaeology and Anthropology of the Dead by Mark Q. Sutton introduces the scientific recovery, laboratory analysis, and contextual interpretation of human remains. Sutton outlines how osteological evidence illuminates past health, demography, mobility, and social structures, while highlighting bioarchaeological applications in modern forensic contexts, war crimes, and genocide investigations.

Acc. No: 103345

Call No: [930.1 SUT-B](#)



Bioarchaeology: Interpreting Behavior from the Human Skeleton

Author: Clark Spencer Larsen

Publisher: Cambridge University Press

Overview: Bioarchaeology: An Introduction to the Archaeology and Anthropology of the Dead by Mark Q. Sutton introduces the scientific recovery, laboratory analysis, and contextual interpretation of human remains. Sutton outlines how osteological evidence illuminates past health, demography, mobility, and social structures, while highlighting bioarchaeological applications in modern forensic contexts, war crimes, and genocide investigations.

Acc. No: 103346

Call No: [930.1 LAR-B](#)