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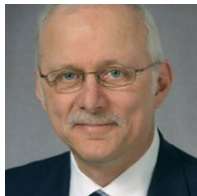
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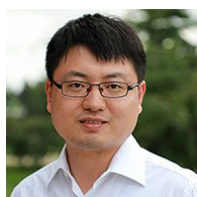
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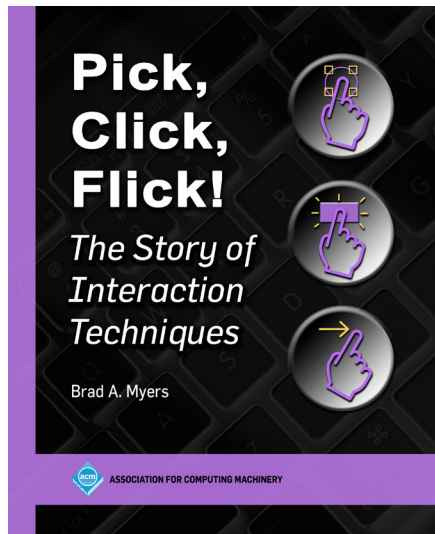


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COLLECTION 3 - New and Forthcoming



Pick, Click, Flick!

The History of Interaction Techniques

Brad A. Myers, Carnegie Mellon University

ISBN: 9798400709470 | DOI: 10.1145/3617448 | © 2024 | 810 pages

Paperback: \$69.95 | Hardcover: \$89.95 | eBook: \$47.96

This book provides a comprehensive study of the many ways to interact with computers and computerized devices. An “interaction technique” starts when the user performs an action that causes an electronic device to respond, and includes the direct feedback from the device to the user. Examples include physical buttons and switches, on-screen menus and scrollbars operated by a mouse, touchscreen widgets, gestures such as flick-to-scroll, text entry on computers and touchscreens, interactions with conversational agents such as Apple Siri, Google Assistant, Amazon Alexa,

and Microsoft Cortana, and adaptations of all of these for people with disabilities. *Pick, Click, Flick!* is written for anyone interested in interaction techniques, including computer scientists and designers working on human-computer interaction, as well as implementers and consumers who want to understand and get the most out of their digital devices.



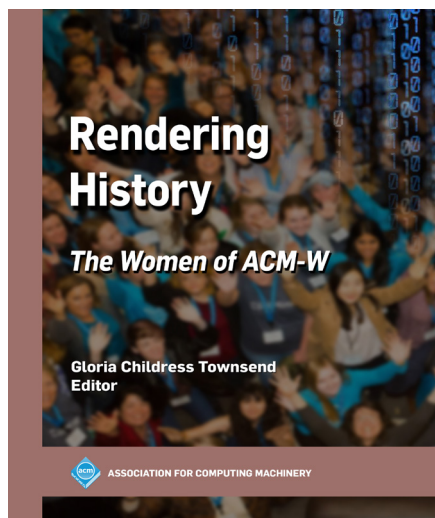
Digital Dreams Have Become Nightmares What We Must Do, 2nd Edition

Ron Baecker, University of Toronto, with Jonathan Grudin, Microsoft

ISBN: 9798400717680 | DOI: 10.1145/3640479 | © 2024 | 358 pages

Paperback: \$39.95 | Hardcover: \$59.95 | eBook: \$31.96

Digital technologies have made amazing progress over the past 80 years, especially in the health sector, communications, commerce, community and recent advances in AI. However, there are side effects, nightmares that now threaten all of us. If humankind risks painting itself into a new-age technological holocaust, how can we act to mitigate the damages through ethical career decisions, careful analysis, thoughtful design, consideration of how bad actors may use technology, research, citizen engagement, legislation, and regulation?



Rendering History

The Women of ACM-W

Gloria Childress Townsend, DePauw University

ISBN: 9798400717727 | DOI: 10.1145/3640508 | © 2024 | 478 pages

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The Association for Computing Machinery (ACM) has more than 100,000 members circling the globe, including trailblazing women who created ACM-W (ACM's Committee on Women in Computing) in 1993. This book, published in celebration of ACM-W's 30th birthday, divides the history of ACM-W into three parts. ACM-W advocates internationally for the full engagement of women in all aspects of the computing field, providing a wide range of programs and services to ACM members and working in the larger community to advance the contributions of technical women.

Linking the World's Information

*Essays on
Tim Berners-Lee's
Invention of the
World Wide Web*

Oshani Seneviratne, James Hendler (Editors)



Linking the World's Information

Essays on Tim Berners-Lee's Invention of the World Wide Web

Oshani Seneviratne, Rensselaer Polytechnic Institute

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ISBN: 9798400707940 | DOI: 10.1145/3591366 | © 2023 | 288 pages

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When Sir Tim Berners-Lee first proposed the foundations of the World Wide Web at CERN in 1989, his manager called it "vague, but exciting." How things have changed since then! Twenty-six years later, Berners-Lee won the ACM Turing Award "for inventing the World Wide Web, the first Web browser, and the fundamental protocols and algorithms allowing the Web to scale." This book is a compilation of articles on the original

ideas of a true visionary and the subsequent research and development work he has led, helping to realize the Web's full potential. It is intended for readers interested in the Web's original technical development, how it has changed over time, and the social impacts of the Web as steered by Berners-Lee since the very beginning. This book will help the reader to understand how Sir Tim's invention of the World Wide Web has revolutionized not just Computer Science, but global society itself.

From Algorithms to Thinking Machines

*The New
Digital Power*

Domenico Talia



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The New Digital Power

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This book uses an informative style to present the concepts of algorithms, data and computation and discuss the role of algorithms and computers in ruling and shaping the world in which we live and work. The main goal is to help readers to clearly understand the power and impact of pervasive use of algorithms on human lives. The book combines a popular approach with a well-founded scientific description aiming at discussing both principles and applications of algorithms, Big Data, and machine intelligence.

The Societal Impacts of Algorithmic Decision-Making

Manish Raghavan



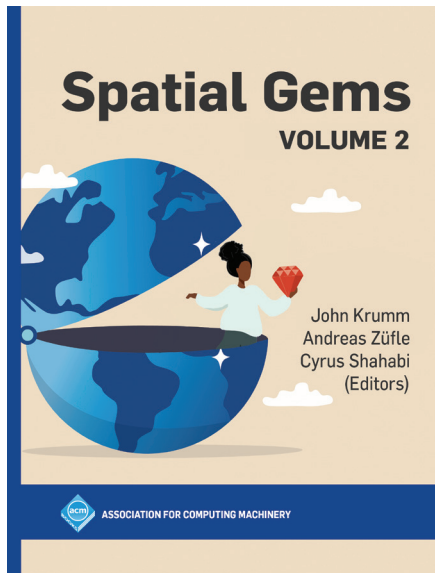
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Manish Raghavan, Massachusetts Institute of Technology

ISBN: 9798400708619 | DOI: 10.1145/3603195 | © 2024 | 366 pages

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This book demonstrates the need for and the value of interdisciplinary research in addressing important societal challenges associated with the widespread use of algorithmic decision-making. Algorithms are increasingly being used to make decisions in various domains such as criminal justice, medicine, and employment. While algorithmic tools have the potential to make decision-making more accurate and transparent, they pose serious challenges to societal interests. For example, they can perpetuate discrimination, cause representational harm, and deny opportunities.

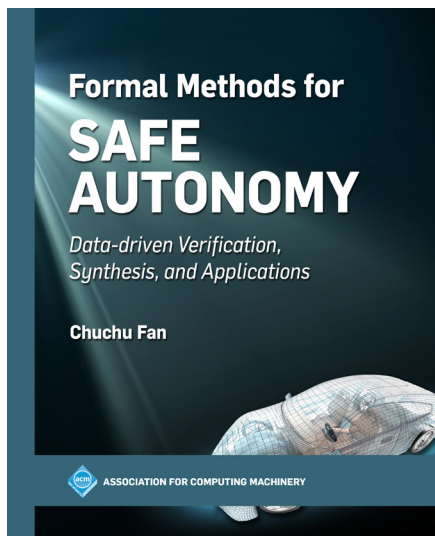


Spatial Gems, Volume 2

John Krumm, Microsoft Research
Andreas Züfle, George Mason University
Cyrus Shahabi, University of Southern California

ISBN: 9798400709340 | DOI: 10.1145/3617291 | © 2024 | 158 pages
Paperback: \$49.95 | Hardcover: \$69.95 | eBook: \$39.96

Spatial gems are computational techniques for processing spatial data. This book, a follow-up to the first *Spatial Gems* volume, is a further collection of techniques contributed by leading research experts. Although these approaches were developed as part of larger research projects, the gems represent fundamental solutions that are generically applicable to many different problems. Our goal is to expose these useful techniques that are not yet in textbooks and often buried inside technical research papers.



Formal Methods for Safe Autonomy

Data-driven Verification, Synthesis, and Applications

Chuchu Fan, Massachusetts Institute of Technology

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The book provides insights on the level of assurance that can be provided by formal methods to today's autonomous systems. Autonomous systems are often safety-critical and are expected to work in uncertain environments. Ensuring design correctness and safety of autonomous systems has significant financial and legal implications. Existing design and test methodologies are inadequate so we introduce new verification and synthesis algorithms to provide certifiable trusts for products with the vagaries of realworld autonomous systems.

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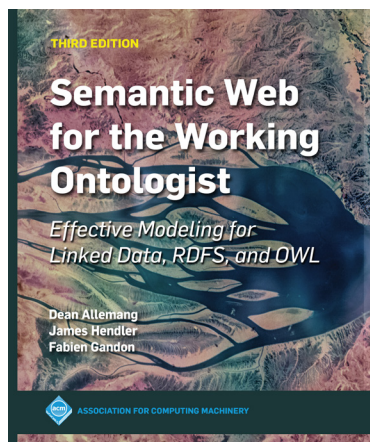
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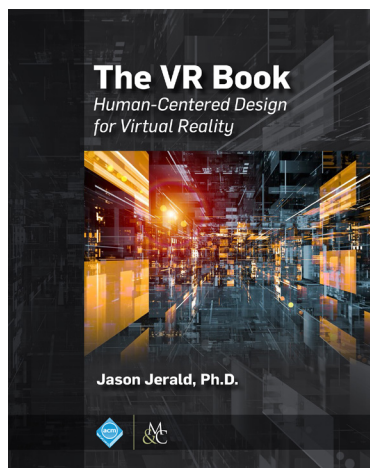
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¹ <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>

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