Record Nr. UNINA9910337835603321 Summer of Simulation: 50 Years of Seminal Computer Simulation Titolo Research // edited by John Sokolowski, Umut Durak, Navonil Mustafee. Andreas Tolk Cham:,: Springer International Publishing:,: Imprint: Springer,, Pubbl/distr/stampa **ISBN** 3-030-17164-7 Edizione [1st ed. 2019.] 1 online resource (286 pages) Descrizione fisica Simulation Foundations, Methods and Applications, , 2195-2825 Collana 003.3072 Disciplina 003.3 Soggetti Computer simulation Mathematical models **Engineering mathematics** Engineering - Data processing Mathematical physics Computer-aided engineering Computer Modelling Mathematical Modeling and Industrial Mathematics Mathematical and Computational Engineering Applications Theoretical, Mathematical and Computational Physics Computer-Aided Engineering (CAD, CAE) and Design Lingua di pubblicazione Inglese **Formato** Materiale a stampa Livello bibliografico Monografia Nota di contenuto Chapter 1. Summer of Simulation: An Introduction -- Chapter 2. 50 Summers of Computer Simulation -- Chapter 3. How Theory and Abstraction Drive Progress in Simulation Science and Practice --Chapter 4. High-speed, Low-cost Simulation of Power Electronic Systems – a 50+ Year Collaboration -- Chapter 5. Over Fifty Years of My Involvement in Simulation -- Chapter 6. Limitations and Usefulness of Computer Simulations for Complex Adaptive Systems Research --Chapter 7. Cloud Based Simulation -- Chapter 8. Advanced Discrete-

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the Summer Computer Simulation Conference -- Chapter 10. New Frontiers in Modeling and Simulation in Complex Systems Engineering: The Case of Synthetic Emergence -- Chapter 11. An Introduction to Pedestrian Modeling Using Spatial Discrete-Event Modeling and Simulation -- Chapter 12. Using Agnet-Based Modeling to Assess Liquidity Mismatch in Open-End Bond Funds -- Chapter 13. A Partially-Grounded Agent Based Model on Demonetisation Outcomes in India.

This book is based on the "Summer Simulation Multi-Conference" (SCSC), which has been a prominent platform for the dissemination of scholarly research in the M&S community for the last 50 years. In keeping with the conference's seasonal title, the authors have called this half-century "the summer of simulation," and it has led not only to simulation-based disciplines but also simulation as a discipline. This book discusses contributions from the SCSC in four sections. The first section is an introduction to the work. The second section is devoted to contributions from simulation research fellows who were associated with the SCSC, while the third section features the SCSC's most influential contributions. Lastly, the fourth section includes contributions from the best papers in the last five years. Features: • A comprehensive volume dedicated to one of the simulation domain's major conferences: the SCSC • Offers a scientometric analysis of the SCSC • Revisits high-impact topics from 50 years of the SCSC • Includes chapters by simulation research fellows associated with the SCSC • Presents updated best-paper contributions from the recent conference This work will be of value to anyone interested in the evolution of modeling and simulation over the last fifty years. Readers will gain a perspective on what drove this evolution, and develop an understanding of the key contributions that allowed this technology to grow into its own academic discipline and profession.