

1. Record Nr.	UNISA996465873603316
Titolo	Dependable and Historic Computing [[electronic resource] ] : Essays Dedicated to Brian Randell on the Occasion of his 75th Birthday / / edited by Cliff B. Jones, John L. Lloyd
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2011
ISBN	3-642-24541-2
Edizione	[1st ed. 2011.]
Descrizione fisica	1 online resource (XII, 523 p. 137 illus., 60 illus. in color.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 6875
Disciplina	004
Soggetti	Computers—History Operating systems (Computers) Data protection Microprogramming Software engineering Compilers (Computer programs) History of Computing Operating Systems Data and Information Security Control Structures and Microprogramming Software Engineering Compilers and Interpreters
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	Bibliographic Level Mode of Issuance: Monograph
Nota di bibliografia	Includes bibliographical references and author index.
Nota di contenuto	Part A: Biographical -- What I Learned from Brian (Hermann Kopetz) -- Brian Randell: A Biographical Note (John L. Lloyd and Tom Anderson) -- Part B: Conference Papers -- On Building a Referee's Avatar (Algirdas Avizienis) -- From Theory to Practice: The Invention of Programming, 1947-51 (Martin Campbell-Kelly) -- Transactions: From Local Atomicity to Atomicity in the Cloud (David Lomet) -- From DSS to MILS (John Rushby) -- Pre-electronic Computing (Doron Swade) -- Whetstone Wanderings (Brian Wichmann) -- Part C: Contributed Papers -- Using Real-Time Road Traffic Data to Evaluate Congestion (Jean

Bacon, Andrei Iu. Bejan, Alastair R. Beresford, David Evans, Richard J. Gibbens, and Ken Moody) -- Fault Tolerant Autonomic Computing Systems in a Chemical Setting (Jean-Pierre Banatre, Christine Morin, and Thierry Priol) -- Out of a Closet: The Early Years of the Computer Museum (Gordon Bell) -- Timing Faults and Mixed Criticality Systems (Alan Burns and Sanjoy Baruah) -- Professor Brian Randell and the History of Computing (Paul E. Ceruzzi) -- Computer Storage Fragmentation: Pioneering Work of Brian Randell (Ed Coffman) -- IBM-ACS: Reminiscences and Lessons Learned from a 1960's Supercomputer Project (Lynn Conway) -- The Belgian Electronic Mathematical Machine (1951-1962): An Account (Pierre-Jacques Courtois) -- On the Resilience of the Dependability Framework to the Intrusion of New Security Threats (Marc Dacier) -- Virtual Fault Tolerance (Peter J. Denning) -- Recovery Blocks (Tony Hoare) -- The Development and Writing of "Process Structuring" (J.J. Horning) -- A Tolerant Approach to Faults (Michael Jackson) -- Causality in Structured Occurrence Nets (Jetty Kleijn and Maciej Koutny) -- Diversity (John C. Knight) -- Swords and Ploughshares: Connections between Computer Projects for War and Peace, 1945–55 (Simon Lavington) -- The Evolution of the Arjuna Transaction Processing System (M.C. Little and S.K. Shrivastava) -- Making Experiments Dependable (Roy Maxion) -- Wallpaper Maps (M. Douglas McIlroy) -- Incremental Design: Programming with Holes and Evolvers (Ron Morrison, Dharini Balasubramaniam, and Brian Warboys) -- Carrying Goals to Newcastle: A Tribute to Brian Randell (Peter G. Neumann) -- Distributed Computing in the 21st Century: Some Aspects of Cloud Computing (Fabio Panzneri, Ozalp Babaoglu, Stefano Ferretti, Vittorio Ghini, and Moreno Marzolla) -- Software Engineering: Multi-person Development of Multi-version Programs (David Lorge Parnas) -- Tolerance of Design Faults (David Powell, Jean Arlat, Yves Deswarte, and Karama Kanoun) -- On the Implementation of Concurrent Objects (Michel Raynal) -- Beyond Traces and Independence (Fred B. Schneider) -- Socio-technical Complex Systems of Systems: Can We Justifiably Trust Their Resilience? (Luca Simoncini) -- Safety, Security and Dependability in Crowd Computing (W\_ladys\_law M. Turski) -- Achieving Dependability in Service-Oriented Systems (Jie Xu).

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### Sommario/riassunto

This Festschrift volume, published in honor of Brian Randell on the occasion of his 75th birthday, contains a total of 37 refereed contributions. Two biographical papers are followed by the six invited papers that were presented at the conference 'Dependable and Historic Computing: The Randell Tales', held during April 7-8, 2011 at Newcastle University, UK. The remaining contributions are authored by former scientific colleagues of Brian Randell. The papers focus on the core of Brian Randell's work: the development of computing science and the study of its history. Moreover, his wider interests are reflected and so the collection comprises papers on software engineering, storage fragmentation, computer architecture, programming languages and dependability. There is even a paper that echoes Randell's love of maps. After an early career with English Electric and then with IBM in New York and California, Brian Randell joined Newcastle University. His main research has been on dependable computing in all its forms, especially reliability, safety and security aspects, and he has led several major European collaborative projects.

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