

1. Record Nr.	UNISA996465819603316
Titolo	Communicating Sequential Processes. The First 25 Years [[electronic resource] ] : Symposium on the Occasion of 25 Years of CSP, London, UK, July 7-8, 2004. Revised Invited Papers // edited by Ali E. Abdallah, Cliff B. Jones, Jeff W. Sanders
Pubbl/distr/stampa	Berlin, Heidelberg : , : Springer Berlin Heidelberg : , : Imprint : Springer, , 2005
ISBN	3-540-32265-5 3-540-25813-2
Edizione	[1st ed. 2005.]
Descrizione fisica	1 online resource (XIV, 326 p.)
Collana	Theoretical Computer Science and General Issues, , 2512-2029 ; ; 3525
Disciplina	005.13/3
Soggetti	Computer science Compilers (Computer programs) Software engineering Computer programming Computer Science Logic and Foundations of Programming Compilers and Interpreters Software Engineering Programming Techniques
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Note generali	"The symposium CSP25 ... commemorates the semi-jubilee of ... Tony Hoare's paper 'Communicating sequential processes'"--Pref.
Nota di bibliografia	Includes bibliographical references and index.
Nota di contenuto	Semantic Foundations -- Retracing the Semantics of CSP -- Seeing Beyond Divergence -- Refinement and Simulation -- Process Algebra: A Unifying Approach -- Linking Theories of Concurrency -- Hardware Synthesis -- CSP, occam and Transputers -- Models for Data-Flow Sequential Processes -- Implementation of Handshake Components -- Transactions -- A Trace Semantics for Long-Running Transactions -- Practical Application of CSP and FDR to Software Design -- Concurrent Programming -- Communicating Mobile Processes -- Model-Based Design of Concurrent Programs -- Linking Theories -- Of Probabilistic wp and CSP—and Compositionality -- Order, Topology, and Recursion Induction in CSP -- Security -- Verifying Security Protocols: An

Application of CSP -- Shedding Light on Haunted Corners of Information Security -- Automated Development and Model Checking -- Operational Semantics for Fun and Profit -- On Model Checking Data-Independent Systems with Arrays with Whole-Array Operations -- Industrial Strength CSP -- Industrial Strength CSP: Opportunities and Challenges in Model-Checking -- Applied Formal Methods – From CSP to Executable Hybrid Specifications.

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Sommario/riassunto

This volume, like the symposium CSP25 which gave rise to it, commemorates the semi-jubilee of Communicating Sequential Processes. 1 Tony Hoare's paper "Communicating Sequential Processes" is today widely regarded as one of the most influential papers in computer science. To commemorate it, an event was organized under the auspices of BCS-FACS (the British Computer Society's Formal Aspects of Computing Science specialist group). CSP25 was one of a series of such events organized to highlight the use of formal methods, emphasize their relevance to modern computing and promote their wider application. BCS-FACS is proud that Tony Hoare presented his original ideas on CSP at one of its first meetings, in 1978. The two-day event, 7–8 July 2004, was hosted by London South Bank University's Institute for Computing Research, Faculty of Business, Computing and Information Management. The intention was to celebrate, reflect upon and look beyond the first quarter-century of CSP's contribution to computer science. The meeting examined the impact of CSP on many areas stretching from semantics (mathematical models for understanding concurrency and communications) and logic (for reasoning about behavior), through the design of parallel programming languages (i/o, parallelism, synchronization and threads) to applications varying from distributed software and parallel computing to information security, Web services and concurrent hardware circuits. It included a panel discussion with panelists Brookes, Hoare, de Roever and Roscoe (chaired by Jeffrey Sanders), poster presentations by PhD students and others, featured a fire alarm (requiring evacuation in the rain!) and concluded with the presentation of a fountain pen to Prof. Sir C. A. R. Hoare.

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