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Titolo	From Object-Orientation to Formal Methods [[electronic resource] ] : Essays in Memory of Ole-Johan Dahl // edited by Olaf Owe, Stein Krogdahl, Tom Lyche
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Collana	Lecture Notes in Computer Science, , 0302-9743 ; ; 2635
Disciplina	005.11
Soggetti	Software engineering Computer programming Programming languages (Electronic computers) Computer logic Mathematical logic Software Engineering/Programming and Operating Systems Software Engineering Programming Techniques Programming Languages, Compilers, Interpreters Logics and Meanings of Programs Mathematical Logic and Formal Languages
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 at the end of each chapters and index.
Nota di contenuto	A Biography of Ole-Johan Dahl -- A Bibliography of Ole-Johan Dahl -- The Birth of Object Orientation: the Simula Languages -- An Algebraic Theory of Actors and Its Application to a Simple Object-Based Language -- Towards Posit & Prove Calculi for Requirements Engineering and Software Design -- Distributed Concurrent Object-Oriented Software -- Composing Hidden Information Modules over Inclusive Institutions -- Towards the Verifying Compiler -- Object-Oriented Specification and Open Distributed Systems -- SIMULA and Super-Object-Oriented Programming -- Efficient Coroutine Generation of Constrained Gray Sequences -- Consistency of Inheritance in

Object-Oriented Languages and of Static, ALGOL-like Binding -- The Power of Abstraction, Reuse, and Simplicity: An Object-Oriented Library for Event-Driven Design -- Iterative Synthesis of Control Guards Ensuring Invariance and Inevitability in Discrete-Decision Games -- Incremental Reasoning for Object Oriented Systems -- Pure Type Systems in Rewriting Logic: Specifying Typed Higher-Order Languages in a First-Order Logical Framework -- Building Optimal Binary Search Trees from Sorted Values in  $O(N)$  Time.

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### Sommario/riassunto

After Ole-Johan's retirement at the beginning of the new millennium, some of us had thought and talked about making a "Festschrift" in his honor. When Donald Knuth took the initiative by sending us the first contribution, the process began to roll! In early 2002 an editing group was formed, including Kristen Nygaard, who had known Ole-Johan since their student days, and with whom he had developed the Simula language. Then we invited a number of prominent researchers familiar with Ole-Johan to submit contributions for a book honoring Ole-Johan on the occasion of his 70th birthday. Invitees included several members of the IFIP 2.3 working group, a forum that Ole-Johan treasured and enjoyed participating in throughout his career. In spite of the short deadline, the response to the invitations was overwhelmingly positive. The original idea was to complete the book rather quickly to make it a gift he could read and enjoy, because by then he had had cancer for three years, and his health was gradually deteriorating. Kristen had been regularly visiting Ole-Johan, who was in the hospital at that time, and they were working on their Turing award speech. Ole-Johan was gratified to hear about the contributions to this book, but modestly expressed the feeling that there was no special need to undertake a book project on his behalf. Peacefully accepting his destiny, Ole-Johan died on June 29, 2002.

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