

Table of Contents

Manfred Broy

- 10 Software Engineering – From Auxiliary to Key Technology

Ernst Denert

- 14 The Relevance of the Software Pioneers for sd&m

Friedrich L. Bauer

- 26 From the Stack Principle to ALGOL

K.Samelson, F.L. Bauer

- 43 *Sequentielle Formelübersetzung*

F.L. Bauer

- 67 *Verfahren zur automatischen Verarbeitung von kodierten Daten und Rechenmaschinen zur Ausübung des Verfahrens*

Ole-Johan Dahl

- 78 The Roots of Object Orientation: The Simula Language

Ole-Johan Dahl, Kristen Nygaard

- 91 *Class and Subclass Declarations*

Niklaus Wirth

- 108 Pascal and Its Successors

- 121 *The Programming Language Pascal*

- 149 *Program Development by Stepwise Refinement*

Frederick P. Brooks

- 170 The IBM Operating System/360

G.H. Mealy, B.I. Witt, W.A. Clark

- 179 *The Functional Structure of OS/360*

Alan Kay

- 230 Graphical User Interfaces

Rudolf Bayer

- 232 B-Trees and Databases, Past and Future

Rudolf Bayer, E. McCreight

- 245 *Organization and Maintenance of Large Ordered Indexes*

E.F. Codd

- 263 *A Relational Model of Data for Large Shared Data Banks*

Peter Chen

- 296 Entity-Relationship Modeling: Historical Events, Future Trends and Lessons Learned
- 311 *The Entity Relationship Model – Toward a Unified View of Data*

Edsger W. Dijkstra

- 340 EWD 1308: What Led to "Notes on Structured Programming"
- 347 *Solution of a Problem in Concurrent Programming Control*
- 351 *Go To Statement Considered Harmful*

C.A.R. Hoare

- 356 Assertions: A Personal Perspective
- 367 *An Axiomatic Basis for Computer Programming*
- 385 *Proof of Correctness of Data Representations*

David L. Parnas

- 399 The Secret History of Information Hiding
- 411 *On the Criteria to Be Used in Decomposing Systems into Modules*
- 429 *On a "Buzzword": Hierarchical Structure*

John V. Guttag

- 442 Abstract Data Types, Then and Now
- 453 *Abstract Data Types and the Development of Data Structures*

Michael Jackson

- 480 JSP in Perspective
- 495 *Constructive Methods of Program Design*

Tom DeMarco

- 520 Structured Analysis: Beginnings of a New Discipline
- 529 *Structure Analysis and System Specification*

Michael Fagan

- 562 A History of Software Inspections
- 575 *Design and Code Inspections to Reduce Errors in Program Development*
- 609 *Advances in Software Inspections*

Barry Boehm

- 632 Early Experiences in Software Economics
- 641 *Software Engineering Economics*

Erich Gamma

- 688 Design Patterns – Ten Years Later
Erich Gamma, Richard Helm, Ralph Johnson, John Vlissides
- 701 *Design Patterns: Abstraction and Reuse of Object-Oriented Design*