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Foreword

Twenty-five years ago, the first of two NATO workshops to discuss the software crisis was held at Garmisch-Partenkirchen. From these workshops, the discipline of software engineering was born. Now, the fourth European Software Engineering Conference returns to Garmisch to celebrate this 25th anniversary and to look forward to the next 25 years.

More than 135 papers were submitted to ESEC'93 out of which the 27 papers in these Proceedings were accepted. Papers were submitted from most European countries, from the US, Canada, Japan and other Asian countries. Quality was the principal selection criterion for selected papers but the Programme Committee also wanted to ensure that the papers presented included both advanced academic research and the industrial use of software engineering technology.

We have therefore a mixture of themes. Some, such as Software Engineering and CSCW, are forward looking and anticipate future developments; others, such as Systems Engineering, are more concerned with the reports of practical industrial applications. Some sessions, such as that on Software Reuse, reflect the fact that some of the concerns first raised in 1968 remain unsolved problems. The increasing importance of requirements engineering is reflected by the inclusion of two sessions on this topic. The long-term research objectives of understanding the software process and the development of effective environmental support are also covered here.

The submitted papers are complemented by presentations from distinguished invited speakers from Europe and North America. Invited papers cover real-time systems, software measurement and metrics, and industrial software engineering practice. We are particularly pleased to welcome our introductory speakers Professors F.L. Bauer and J. Buxton who played a large part in 1968 and 1969 workshops and who have made a major contribution to the development of software engineering.

The organisation of a major conference is impossible without a great deal of help and support. We are grateful to the members of the Programme Committee and to other reviewers for their time. Pere Botella and Johannes Siedersleben the Tutorial and the Tools Fair organisers have made an important contribution to the success of ESEC'93. Particular thanks also to Jacqui Forsyth at Lancaster University and to Uta Weber at the Technical University of Munich who provided invaluable help with the technical and the local organisation.

European work in software engineering is now comparable with the best in the world and in some fields, such as the use of formal methods, it is generally recognised that European work is pre-eminent. We believe that this series of ESEC conferences, first established in 1987, has contributed to this and we are confident that ESEC'93 will continue the high standard of its predecessors.

July 1993

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Table of Contents

Invited Papers

On the Decline of Classical Programming 1
J.N. Buxton

Computers are not Omnipotent 10
D. Harel

Real-Time Systems: A Survey of Approaches to Formal Specification and Verification 11
C. Ghezzi with M. Felder and C. Bellettini

Software Engineering in Business and Academia: How Wide is the Gap? 37
E. Denert

Software Faults in Evolving a Large, Real-Time System: A Case Study 48
D.E. Perry with C.S. Stieg

The Experience Factory and its Relationship to Other Improvement Paradigm 68
V.R. Basili

Requirements Specification 1

Inconsistency Handling in Multi-Perspective Specifications 84
A. Finkelstein, D. Gabbay, A. Hunter, J. Kramer and B. Nuseibeh

Requirements Engineering: An Integrated View of Representation, Process and Domain 100
M. Jarke, K. Pohl, S. Jacobs, J. Bubenko, P. Assenova, P. Holm, B. Wangler, C. Rolland, V. Plihon, J.-R. Schmitt, A. Sutcliffe, S. Jones, N. Maiden, D. Till, Y. Vassiliou, P. Constantopoulos and G. Spanoudakis

Requirements Specification 2

Making Changes to Formal Specifications: Requirements and an Example 115
D.W. Bustard and A.C. Winstanley

Formal Requirements Made Practical 127
J. Hagelstein, D. Roelants and P. Wodon

Environments 1

Databases for Software Engineering Environments - The Goal Has not yet Been Attained 145
W. Emmerich, W. Schäfer and J. Welsh

A Regression Testing Database Model 163
L. Liu, D.J. Robson and R. Ellis

Environments 2

Experiences with a Federated Environment Testbed 175
A.W. Brown, E.J. Morris, P.F. Zarrella, F.W. Long and W.M. Caldwell

Observations on Object Management Systems and Process Support in Environments 197
I. Thomas

Systems Engineering 1

Software Technology for a Distributed Telecommunication System 213
H. Eggers

Industrial Software Development - A Case Study 226
U. Cederling

Systems Engineering 2

Quantitative Approach to Software Management: The ami Method 238
A. Kuntzmann-Combelles

Preventative Software Engineering 251
J. Reichardt

Distributed Software Engineering

Distributed Information Systems: An Advanced Methodology 263
A. Aue and M. Breu

Tractable Flow Analysis for Anomaly Detection in Distributed Programs 283
S.C. Cheung and J. Kramer

Real-Time Systems

A Pragmatic Task Design Approach Base on a Ward/Mellor Real-Time Structured Specification....301
J. Tuya, L. Sánchez, R Zurita and J.A. Corrales

Integration of Structured Analysis and Timed Statecharts for Real-Time and Concurrency Specification....313
M. von der Beeck

Software Engineering and CSCW

Language Constructs for Cooperative Systems Design....329
F. DePaoli and F. Tisato

Scrutiny: A Collaborative Inspection and Review System....344
J. Gintell, J. Arnold, M. Houde, J. Kruszelnicki, R. McKenney and G. Memmi

COO: A Transaction Model to Support COOperating Software Developers COOrdination....361
C. Godart

Software Reuse

An Experiment in Software Retrieval....380
R. Adams

Using Formal Methods to Construct a Software Component Library....397
J.-J. Jeng and B.H.C. Cheng

Capsule Oriented Reverse Engineering for Software Reuse....418
H. Gall and R. Klösch

Software Process

Automatic Replanning of Task Networks for Process Model Evolution in EPOS....434
C. Liu and R. Conradi

Provence: A Process Visualisation and Enactment Environment....451
B. Krishnamurthy and N.S. Barghouti

Process Programming with Active and Passive Components....466
C.J. Breiteneder and T.A. Mueck

Formal Aspects of Software Engineering

A Formal Framework for ASTRAL Intra-Level Proof Obligations 483
A. Coen-Porisini, R.A. Kemmerer and D. Mandrioli

Assertion-Based Debugging of Imperative Programs by Abstract Interpretation 501
F. Bourdoncle