Foreword

Welcome to the Seventh International Workshop on Computer-Aided Software Engineering (CASE'95) and to the beautiful city of Toronto! After the 1992 Montreal conference, this is the second time that this workshop is being held in Canada.

CASE'95 is the premier conference and working meeting of the CASE field. It is the crossroads of practitioners and researchers from industry, academia, and government. Workshops, refereed papers, presentations, tutorials, and working meetings explore and report on the most important practical, applied, experimental, and theoretical work currently conducted in the CASE field for systems and software evolution.

CASE'95 presents a broad perspective of the technical issues facing the CASE field. The conference includes three keynote addresses, 40 research papers, half-day and full-day tutorials by leaders of the field, workshops on timely and exciting topics, experience reports, a panel session, exhibits, and a tools presentation track. CASE'95 workshops are topical discussion-oriented meetings, half or full day, for detailed exploration of state-of-the-art issues as proposed by knowledgeable users, developers, and researchers. Exhibits feature both research prototypes and commercial tools. CASE'95 is joint with the 2nd Working Conference on Reverse Engineering (WCRE).

The theme of this year’s International Workshop on Computer-Aided Software Engineering is Evolutionary Engineering of Software Systems. Software and systems development, management, and evolution will undergo dramatic change in the last half of the 1990s. The growing reliance on client/server architectures, the growth of industrial-strength object-oriented techniques, advances in systems engineering automation, the emergence of powerful repository capabilities, multimedia opportunities, and other factors are already having profound impact on the way systems are designed and implemented. CASE methods, techniques, tools, and environments are evolving to meet these many new needs. Indeed, the CASE in 1995 is far different from the CASE of the late 1980s. Now that CASE is past its initial marketplace boom and bust cycle, attention is turning to the value of CASE technology and the CASE approach for the long term in systems and software engineering.

In memory of Wayne Stevens, one of the pioneers of the CASE community, the IWCase Board established The Stevens Lecture on Software Development Methods. The honor of delivering the Inaugural Stevens Lecture at CASE'95 was awarded to Tony Wasserman, Interactive Development Environments. He is one of the true pioneers in the areas of software development environments and computer-aided software engineering technology. We are also very pleased to have attracted John Swainson, Director of the IBM Toronto Laboratory and Susan Dart, Continus Software Corporation, as keynote speakers for this year’s conference.

The CASE'95 International Program Committee refereed 122 papers and selected 40 excellent papers for inclusion in the proceedings and presentation at CASE'95. This excellent collection of papers spans a broad range of computer-aided software engineering topics. The program also features a panel on an exciting and timely topic: Generating Accessible Documentation from Legacy Systems.

In the spirit of past CASE conferences, the program features a series of half-day and one-day workshops on timely and exciting topics of the field. The purpose of these workshops is to foster exchange of information and ideas among researchers, builders and users of software development tools and techniques.

- CASE Tools for Large Reengineering Projects
  Kostas Kontogiannis, McGill University, Canada; Ted Kitzmiller, Boeing, USA; Toru Takeshita, Chubu University, Japan

- Business Process Reengineering Tools
  Elliot Chikofsky, DMR Group, USA

- CASE Tool Integration
  Alan Brown, SEI, USA

- Object-Oriented Frameworks for Application Development and Integration
  Sridhar Raghavan, DEC; Rudolf Keller, Universite de Montreal, Canada

- Architecture-Based CASE Systems
  Ric Holt, Spiros Mancoridis, University of Toronto, Canada
The tutorials program features a collection of exciting tutorials by experienced educators on central topics in the field of computer-aided software engineering:

- **Design Patterns: Elements of Reusable Object-Oriented Software**  
  R. Helm, DMR Group, Canada

- **Software Maintenance Technology: Tools for Change**  
  N. Zvegintzov, Software Maintenance News, USA

- **Distributed Object Management: A Core Technology for Future Computing**  
  M. Brodie, GTE Labs, USA

- **Putting Objects to Work on a Massive Scale: Migrating One of the World's Largest Telecoms to Distributed Object Computing**  
  M. Brodie, GTE Labs, USA

- **Assembling Integrated CASE Environments**  
  A. Brown, D. Carney, E. Morris, K. Wallnau, SEI, USA

- **The ISO 9000 Quality Standards for Software**  
  G. Caldiera, University of Maryland, USA

- **Understanding Software Productivity**  
  W. Scacchi, University of Southern California, USA

The final program of the Seventh International Workshop on Computer-Aided Software Engineering is the result of a great deal of work by many people. First and foremost, we would like to thank all of our sponsors. Secondly, we would like to thank all the authors who submitted excellent papers about their work to CASE'95. Thirdly, we are indebted to the members of the Conference Committee for their generous help and support in all aspects of this conference. We are particularly indebted to the members of the Program Committee who refereed the submitted papers extensively (four reviews per paper) and came from all over the world to the Program Committee meeting at the IBM Centre for Advanced Studies in Toronto. Of course, we wish to express our appreciation to all of the many volunteers who have contributed so much of their time to make CASE'95 a success. Finally, our special thanks to Regina Sipple and Bob Werner at the IEEE Computer Society for their great help and support in producing these proceedings.

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