# ICSE



# 23rd International Conference on Software Engineering

Westin Harbour Castle Hotel Toronto, Ontario, Canada May 12–19, 2001

# **Call for Papers and Participation**

oday, the engineering of software profoundly impacts world economics. For example, the desperate demands by all information technology sectors to adapt their information systems to the web has generated a tremendous need for methods, tools, processes and infrastructure to develop new and evolve existing applications efficiently and cost-effectively.

ICSE 2001, the premier conference for software engineering will present the latest inventions, achievements and experiences in software engineering research and practice. We invite you to participate in ICSE 2001 to help us build an exciting forum for exchanging ideas and experiences in this ever expanding and critical field of software engineering.

We invite submissions of various types on all aspects of software engineering: technical papers, case study reports, and education papers; collocated events; tutorial, workshop, and panel proposals; doctoral symposium applications; formal research demonstrations; posters and informal research demonstrations; and exhibits. We also accept corporate donations, and encourage students to apply as student volunteers.

## Keynote Speakers

- Linda Northrop—Software Engineering Institute, USA
- John Swainson–IBM Corporation, USA
- Bernd Voigt—Lufthansa, Cermany

## **Special Events**

- David L. Parnas Symposium
- Perspectives on Software Engineering Panel
- Software Engineering Research Agendas Panel
- Invited Industry Presentations

## **Collocated Conferences**

- International Workshop on Program Comprehension (IWPC)
- Engineering for Human-Computer Interaction (EHCI)
- Symposium on Software Reusability (SSR)

http://www.csr.uvic.ca/icse2001/

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## **General Chair**

Hausi A. Müller–University of Victoria, Canada; hausi@csr.uvic.ca

Program Chairs Mary Jean Harrold–Georgia Institute of Technology, USA; harrold@cc.gatech.edu Wilhelm Schäfer–University of Paderborn, Cermany; wilhelm@uni-paderborn.de

## **Technical Program Committee**

Gregory D. Abowd-Georgia Institute of Technology, USA Joanne M. Atlee–University of Waterloo, Canada Thomas Ball–Microsoft Research, USA Don Batory-University of Texas at Austin, USA Israel Ben-Shaul-Israel Institute of Technology, Israel Dan Berry–University of Waterloo, Canada Antonia Bertolino-Instituto di Elaborazione della Informazione CRN, Italy Lionel Briand–Carleton University, Canada Lori A. Clarke–University of Massachusetts, USA Laura K. Dillon-Michigan State University, USA Elisabetta Di Nitto-Politecnico di Milano, Italy Matthew B. Dwyer-Kansas State University, USA Phyllis Frankl-Polytechnic University, USA Kokichi Futatsugi–JAIST, Japan Pankaj K. Carg-Hewlett-Packard Laboratories, USA W. Morven Centleman-Dalhousie University, Canada Carlo Chezzi-Politecnico di Milano, Italy Martin Clinz-University of Zürich, Switzerland Martin L. Griss-Hewlett-Packard Laboratories, USA Katsuro Inoue–Osaka University, Japan Jens Jahnke–University of Victoria, Canada Mehdi Jazayeri–Technical University of Vienna, Austria Richard A. Kemmerer–University of California at Santa Barbara, USA Nicole Lévy-University of Versailles en Ivelines, France Jeff Magee—Imperial College, UK Nenad Medvidovic—University of Southern California, USA Leon J. Osterweil—University of Massachusetts, USA Dewayne E. Perry-University of Texas at Austin, USA Alexander Ban-Nokia Research Center USA Debra J. Richardson-University of California at Irvine, USA Gruia-Catalin Roman-Washington University, St. Louis, USA David S. Rosenblum–University of California at Irvine, USA Gregg Rothermel-Oregon State University, USA Cregor Snelting–University of Passau, Germany Kevin J. Sullivan–University of Virginia, USA Peri Tarr-IBM T.J. Watson Research Center, USA

Walter F. Tichy–University of Karlsruhe, Germany Jim Welsh–University of Queensland, Australia Linda Wills–Georgia Institute of Technology, USA Michal Young–University of Oregon, USA Albert Zündorf–University of Paderborn, Germany

## Case Studies

Jeff Kramer (co-chair)—Imperial College, UK; jk@doc.ic.ac.uk Dennis Smith (co-chair)—Software Engineering Institute, USA; dbs@sei.cmu.edu Gerardo Canfora—University of Sannio, Italy Wolfgang Emmerich—University College London, UK Alfonso Fuggetta—Politeonico di Milano, Italy Kai Koskimies—Tampere University of Technology, Finland Timothy C. Lethbridge—University of Ottawa, Canada Adam Porter—University of Maryland at College Park, USA June Verner—Drexel University, USA

#### **Education Track**

Anthony Finkelstein (co-chair)—University College London, UK; a.finkelstein@cs.ucl.ac.uk Hossein Saiedian (co-chair)—University of Nebraska at Omaha, USA; hossein@unomaha.edu

### Industrial Track

François Coallier (co-chair)—Bell Canada, Canada; françois.coallier@bell.ca Linda Northrop (co-chair)—Software Engineering Institute, USA; Imn@sei.cmu.edu Dewayne E. Perry (co-chair)—University of Texas at Austin, USA; perry@ece.utexas.edu Mikio Aoyama—Niigata Institute of Technology, Japan Volker Cruhn—University of Dortmund, Cermany Gene F. Hoffnagle—IBM Corporation, USA Jim Ning—Andersen Consulting, USA Jacob Slonim—Dalhousie University, Canada

#### Perspectives on Software Engineering David Notkin (chair)—University of Washington, USA; notkin@cs.washington.edu

Software Engineering Research Agendas Dieter Rombach (chair)—Fraunhofer IESE, Cermany; rombach@iese.fhg.de

#### **David L. Parnas Symposium**

Dan Hoffman (co-chair)—University of Victoria, Canada; dhoffman@csr.uvic.ca David M. Weiss (co-chair)—Lucent Technologies, USA; weiss@bell-labs.com

## **Tutorials**

Cail Kaiser (co-chair)—Columbia University, USA; kaiser@cs.columbia.edu Paul Sorenson (co-chair)—University of Alberta, Canada; sorenson@cs.ualberta.ca Alan Brown—Sterling Software, USA Paul C. Clements—Software Engineering Institute, USA Gregor Engels—University of Paderborn, Cermany Oscar Nierstrasz—University of Bern, Switzerland Scott R. Tilley—University of California at Riverside, USA Ursula Wolz—The College of New Jersey, USA

### Workshops

Prem Devanbu (co-chair)—University of California at Davis, USA; devanbu@cs.ucdavis.edu John Mylopoulos (co-chair)—University of Toronto, Canada; jm@cs.toronto.edu Harald Call—Technical University of Vienna, Austria David Carlan—Carnegie Mellon University, USA Roland Mittermeir—University of Klagenfurt, Austria Frank Tip—IBM T.J. Watson Research Center, USA Anneliese von Mayrhauser—Colorado State University, USA Yelena Yesha—University of Maryland at Baltimore County, USA

#### **Doctoral Symposium**

Mary Lou Soffa (chair)—University of Pittsburgh, USA; soffa@cs.pitt.edu Marsha Chechik—University of Toronto, Canada Chris Marlin—Flinders University, Australia Aditya Mathur—Purdue University, USA Jeff Offutt—George Mason University, USA Mary Shaw—Carnegie Mellon University, USA Margaret-Anne Storey—University of Victoria, Canada

## **Research Demonstrations and Posters**

Rudolf K. Keller (chair)–University of Montréal, Canada; keller@iro.umontreal.ca Gerald Cannod–Arizona State University, USA George T. Heineman–Worchester Polytechnic Institute, USA Spencer Rugaber–Georgia Institute of Technology, USA Eleni Stroulia–University of Alberta, Canada Steve Woods–Quackware, Inc., USA

## **Exhibits and Tools Fair**

Homy Dayani-Fard (co-chair)—IBM Toronto Laboratory, Canada; homy@ca.ibm.com Kostas Kontogiannis (co-chair)—University of Waterloo, Canada; kostas@swen.uwaterloo.ca Nicholas Craham—Queen's University, Canada Bruno Laguë—Bell Canada, Canada Spiros Mancoridis—Drexel University, USA Melody Moore—Georgia Institute of Technology, USA Ciancarlo Succi—University of Alberta, Canada Chris Verhoef—University of Amsterdam, The Netherlands

## Publicity

Bashar Nuseibeh (co-chair)—Imperial College, UK; ban@doc.ic.ac.uk Cabriel Silberman (co-chair)—IBM Toronto Laboratory, Canada; gabbys@ca.ibm.com Victor R. Basili—University of Maryland, USA Judith Bishop—University of Pretoria, South Africa Elliot Chikofsky—META Croup, USA Aniello Cimitile—University of Naples, Italy Peter Feiler—Software Engineering Institute, USA Miguel Felder—University of Buenos Aires, Argentina Michel Lemoine—ONERA CERT, France Nikolai Mansurov—Institute for System Programming, Russia Walcélio Melo—Catholic University of Brasilia, Brazil Ettore Merlo—École Polytechnique de Montréal, Canada Ali Mili—Institute for Software Research, USA Václav Rajlich—Wayne State University, USA Karl Reed—La Trobe University, Australia Dieter Rombach—Fraunhofer IESE, Cermany Richard N. Taylor—University of California at Irvine, USA Koji Torii—Nara Institute of Science and Technology, Japan Will Tracz—Lockheed Martin Federal Systems, USA

## **Treasurer and Local Arrangements**

Stephen Perelgut (chair)–IBM Toronto Laboratory, Canada; perelgut@ca.ibm.com Student Volunteers

### Mike Codfrey—University of Waterloo, Canada; migod@plg.uwaterloo.ca Jens Jahnke—University of Victoria, Canada; jens@csr.uvic.ca

#### **Documents and Web Site**

Anatol W. Kark—National Research Council, Canada; Anatol.Kark@nrc.ca Kenny Wong—University of Alberta, Canada; kenw@cs.ualberta.ca

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## **Technical Papers**

Technical papers should describe innovative and significant work in the research and practice of software engineering. The software engineering community consists of researchers and practitioners from many different disciplines and intellectual traditions. Technical papers report on a full range of topics relevant to this community, including software engineering principles, theories, techniques, tools, and empirical evaluations.

Abstracts due: August 14, 2000. Papers due: August 28, 2000.

## **Case Study Reports**

Case studies may be experience reports or exemplars. Experience reports give an account of a significant project accompanied by a critical review of the experience and a discussion of general lessons to be drawn from the experience. Exemplars describe the architecture of a system accompanied by a rationale for the key design decisions and should be organized so that the design can be used by other practitioners. Exemplars should exhibit significant examples of software architecture which can be used for study and insight. **Reports due: August 28, 2000.** 

## **Education Papers**

Proper software engineering education and training can significantly improve the current state of software development and help eliminate some of the traditional problems associated with industrial practices. Pertinent themes include Ph.D. programs in software engineering, distance education and training in software engineering, and curriculum issues such as the SWEBOK project. Priority will be given to education papers that describe research and experiences in these themes.

Papers due: August 28, 2000.

## **Collocated and Special Events**

Collocated events are related software engineering events occurring around the same week and location as ICSE. Special events are highlighted events that are integrated as part of the ICSE program. **Proposals due: August 28, 2000.** 

## **Invited Industry Presentations**

ICSE 2001 will feature an industrial track with invited industry presentations to discuss leading-edge software technology in practice.

## **Tutorial Proposals**

Tutorials provide conference participants with the opportunity to gain new insights, knowledge, and skills in a broad range of areas of software engineering. We are soliciting proposals for full-day (6-hour) or half-day (3-hour) tutorials. A tutorial can cover a wide range of topics, from practical techniques, guidelines, standards, and surveys, to theoretical issues. The topics are not limited to past ICSE tutorial offerings. **Proposals due: October 16, 2000.** 

## **Workshop Proposals**

Workshops provide a forum for a group of (typically 25 to 40) participants to exchange opinions on topics in research and/or applications. Workshops are not alternative forums for full papers, which otherwise could be submitted as technical papers. Participation in a workshop typically depends on submitting a position statement by a deadline specified by the workshop organizers.

## Proposals due: October 16, 2000.

## **Panel Proposals**

Panel sessions serve to stimulate discussion about ideas and issues of importance to the software engineering community. Panels may emphasize complex technical issues, or they may provide an opportunity to air views and address controversies through informed debate. Suitable topics for discussion include pressing issues in software engineering theory and practice, emerging trends and enabling technologies, and professional, organizational, and social issues associated with software engineering.

Proposals due: October 16, 2000.

## **Doctoral Symposium Applications**

The doctoral symposium is a forum for Ph.D. students to present and discuss their research objectives, methods, and preliminary results at an early enough stage to allow useful guidance in completing their dissertation and initiating research careers. Students will interact with and receive useful guidance from established researchers and other attendees in the broad software engineering community. Students should consider participating in the doctoral symposium at least six months before completion of their dissertation, but after having settled on a research area or thesis topic. Applications due: October 16, 2000.

## **Formal Research Demos**

Formal research demonstrations enable conference participants to view research systems in action and to discuss the systems with the people who created them. These formal demonstrations are intended to show early, non-commercial implementations of novel software engineering concepts. These demonstrations are suitable for mature presentations that can be communicated effectively to a large audience using projection technology. In addition, formal demonstrations are required to display a poster or present their system in the exhibits area.

Proposals due: October 16, 2000.

#### **Posters and Informal Demos**

Posters and informal research demonstrations are displayed in the exhibits area and provide the opportunity to exhibit latebreaking results and to discuss these results with conference participants. Informal demonstrations can also be used by presenters who think that their work may be more effectively presented to a small audience.

Proposals due: October 16, 2000.

## **Exhibit Proposals**

ICSE 2001 will provide a hall for commercial exhibits, to feature leading companies offering software engineering capabilities and tools, education and training, books and journals, and consulting services. **Proposals due: January 8, 2001.** 

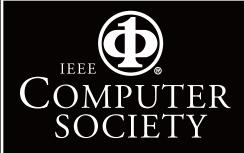
## **Student Volunteer Applications**

The student volunteer program is an exciting opportunity for students from around the world to associate with the top researchers and practitioners in software engineering. In return for about ten hours of their time, student volunteers receive a complimentary registration and other benefits. In the past, volunteers helped as reporters for the ICSE Window on the World (WOW) daily newsletter and assisted the organizers with running the conference smoothly. Student volunteers need to be enrolled in a full-time undergraduate or graduate program at the time of the conference.

Applications due: By early registration.

For more information, including submission details, refer to the ICSE 2001 web site. Submit technical papers, case study reports, and education papers electronically via this web site.

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## **Conference Hotel**

The conference will be held entirely within the Westin Harbour Castle Hotel Complex and Conference Center. This beautiful hotel property is situated directly on the lakefront overlooking Lake Ontario. It is also located just a few blocks away from the heart of downtown Toronto, which abounds in restaurants, theaters, shopping, and other activities.

Westin Harbour Castle Hotel One Harbour Square Toronto, Ontario, Canada M5J 1A6 Voice: +1-416-869-1600 Fax: +1-416-869-0573

## **Contact Information**

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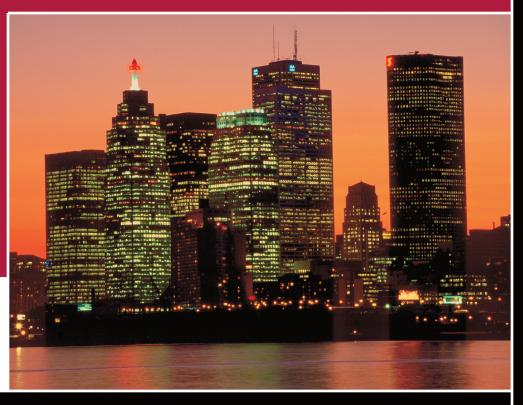


## **City of Toronto**

Toronto is an exciting, vibrant, cosmopolitan city with a wonderful network of parks, recreational, and cultural facilities. Toronto is the home of four professional sports teams and the third largest English-speaking theatre district in the world, behind New York and London. One of the world's most ethnically diverse cities, it is home to more than 80 ethnic communities from Africa, Asia, and Europe.

Toronto is Canada's largest city, serving as Canada's cultural, financial, and transportation hub. Many international carriers provide direct flights to Toronto from major cities in North and South America, Europe, the Orient, and the Pacific Rim.

Toronto is home to the CN Tower, the world's tallest free standing structure; two-time World Champion Blue Jays baseball team; SkyDome, the world's first retractable roof stadium; Ontario Place, which features the first permanent giant-screen IMAX theatre, a Canadian invention; and is near the Niagara region featuring Niagara Falls.



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