



SOFSEM 2005

31st Annual Conference on Current Trends
in Theory and Practice of Informatics

<http://www.sofsem.sk>

January 22 – January 28, 2005

Hotel Máj, Liptovský Ján, Slovakia

CALL FOR PAPERS

SOFSEM (**SO**FTware **SE**Minar) is an annual international conference devoted to the theory and practice of Informatics. Its aim is to promote co-operation among professionals from academia and industry working in various areas of informatics.

SOFSEM is organized in parallel tracks with topics close enough to attract a community of researchers that share specific fields of interest. Each track consists in invited lectures, workshops, and contributed papers. The schedule will allow the attendance of all invited lectures.

SOFSEM offers a unique opportunity to quickly obtain a representative overview of the areas of Computer Science selected as the topics of the year. It provides an optimal framework for discussions, meetings, establishing contacts and socializing. **SOFSEM** is especially suited for young computer scientists.

For SOFSEM 2005 the following tracks and topics have been selected:

Track Foundations of Computer Science:

- Algorithms and data structures (including sequential, parallel, distributed, approximation and number theory algorithms)
- Complexity theory (computational and structural)
- Concurrency theory
- Cryptography and security
- Grammars and formal models
- Semantics and logic of programs
- Quantum computation and quantum information

Track Graph drawing:

- Visualization of computer networks, Web maps, software engineering diagrams, database schemas, chemical and biological structures
- Software systems and libraries for graph visualization
- Geometric graph theory and geometric computing
- Topology and planarity
- Graph combinatorics, algorithms and optimization
- Visual programming languages

Track Modeling and Searching Data in Web-Era:

- XML warehouse
- Structured, unstructured, semistructured data
- Web clustering
- Imperfect information (e.g. uncertain, vague, unreliable, heterogeneous)
- Approximate querying
- Search engines

Track Software Engineering:

- Software specification, software design, software evolution
- Model driven architecture
- Model driven software development
- Web-based software systems modeling
- Tools, languages and mechanisms for meta-modeling
- Domain modeling, new trends in software systems modeling
- Processes and tools for developing open source and free software

Important Dates (for all types of submissions):

Submission deadline:

Abstracts:	August 23, 2004
Full papers:	August 30, 2004
Notification of acceptance/rejection:	October 8, 2004
Final papers (L ^A T _E X, llncs style):	October 24, 2004

The **program** consists of a series of Invited Talks, given by prominent professionals and researchers, Contributed Talks selected by the Program Committee from submitted papers, Workshop Sessions discussing work-in-progress, and the Student Research Forum.

Proceedings containing the invited papers (not exceeding 15 pages) and contributed papers – both full papers (not exceeding 10 pages) and short papers (not exceeding 4 pages) – and the best Student Research Forum paper will be published by the Springer-Verlag in the Lecture Notes in Computer Science series and distributed at the conference. Communications papers describing the work-in-progress and Student Research Forum papers will be published in the local proceedings (with corresponding ISBN). The working language of SOFSEM is English. All authors are required to use Springer llncs style.

Student Research Forum:

An integral part of the SOFSEM is Student Research Forum (chair: *Rastislav Kráľovič*, Comenius University). The forum offers the opportunity to present and discuss students' projects, to receive feedback on the obtained scientific results as well as the work in progress. The papers/posters will be reviewed and selected by Program Committee. To be eligible, all authors of the paper must be students. The best paper of the Sofsem 2005 Student Research Forum will be selected, awarded and published in Springer LNCS Proceedings.

General Conference Chair:

Peter Vojtáš, also Track chair Modeling and Searching Data in Web-Era (Institute of Informatics, P. J. Šafárik University, Košice, Slovakia)

Program Committee Co-chairs:

Bernadette Charron-Bost, Track chair Foundations of Computer Science (Laboratoire STIX, Ecole Polytechnique Palaiseau, France)

Ondrej Šýkora, Track chair Graph drawing (Computer Science, Loughborough University, Loughborough, UK)

Mária Bielíková, Track chair Software Engineering (Faculty of Informatics and Information Technologies, Slovak University of Technology, Bratislava, Slovakia)

Submission:

The conference seeks original papers in all areas of computer science. Papers bridging the gap between theory and applications are highly encouraged. Authors are invited to submit a PostScript/PDF version of their paper together with at most 20 lines of abstract in ASCII format via the conference web page <http://www.sofsem.sk> indicating the track and type of paper (contributed paper, communications paper or student paper).

Organization:

SOFSEM 2005 is organized by

- Slovak Society for Computer Science and
- Comenius University, Bratislava and
- P.J.Šafárik University, Košice

in cooperation with

- Czech Society for Computer Science
- Faculty of Informatics and Information Technologies, Slovak University of Technology, Bratislava
- Slovak Research Consortium for Informatics and Mathematics,

Program Committee:

Mária Bieliková,	Slovakia, Co-chair
Bernadette Charron-Bost,	France, Co-chair
Claude Crepeau,	Canada
Ulrich Eisenecker,	Germany
Ghica van Emde Boas,	Netherlands
Viliam Geffert,	Slovakia
Sergio Greco,	Italy
Patrick Healy,	Ireland
Juraj Hromkovič,	Switzerland
Michael Kaufmann,	Germany
Rastislav Kráľovič,	Slovakia
Jan Kratochvíl,	Czech Republic
Giuseppe Liotta,	Italy
Frederic Magniez,	France
Peter Mellor,	UK
Pavol Návrat,	Slovakia
Jerzy Nawrocki,	Poland
Patrice Ossona de Mendez,	France
Catuscia Palamidessi,	France
Dana Pardubská,	Slovakia
Dimitris Plexousakis,	Greece
Jaroslav Pokorný,	Czech Republic
Karel Richta,	Czech Republic
Mark Roantree,	Ireland
Klaus-Dieter Schewe,	New Zealand
Václav Snášel,	Czech Republic
Ondrej Sýkora,	UK, Co-chair
Gerard Tel,	Netherlands
Ioannis Tollis,	USA
Petr Tůma,	Czech Republic
Peter Vojtáš	Slovakia, General Chair
Imrich Vrfo,	Slovakia
Krzysztof Wecel,	Poland
Pavel Zezula,	Czech Republic

further Program Committee members can be included later

Organizing Committee:

chair: Dana Pardubská (Comenius University, Bratislava)

General Contact Address:

Dana Pardubská - SOFSEM

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For more information visit the SOFSEM 2005 web page <http://www.sofsem.sk>