

8th

joint meeting

F

September 5-9

ESEC2011

E

SZEGED

HUNGARY



THE 8TH JOINT MEETING OF
THE EUROPEAN SOFTWARE ENGINEERING CONFERENCE

AND THE ACM SIGSOFT SYMPOSIUM
ON THE FOUNDATIONS OF SOFTWARE ENGINEERING

CONFERENCE

PROGRAM_

ESEC/FSE 2011	5 Sep Monday		6 Sep Tuesday		7 Sep Wednesday		8 Sep Thursday		9 Sep Friday	
	8:00-9:00-10:30	9:00-10:30	8:00-9:00-10:30	9:00-10:30	8:00-9:00-10:30	9:00-10:30	8:00-9:00-10:30	9:00-10:30	8:00-9:00-10:30	9:00-10:30
AM	Registration	Registration	Registration	Registration	Registration	Registration	Registration	Registration	Registration	Registration
	DS	DS	TB	TB	Keynote	Keynote	Impact paper	Keynote	Outstanding award	Outstanding award
	DS	DS	TB	TB	R1	R2	R7	R9	Artifact papers	Artifact papers
	DS	DS	TB	TB	R3	R4	TD1	PWG presentation	R9	R10
	DS	DS	TB	TB	R5	R6	TD2	Tools, Posters, PWG	R11	R12
PM	PWG	PWG	PWG	PWG	Welcome reception	Welcome reception	Gala dinner	Closing session		
PM+										
Evening										

Legend:

DS – Doctoral Symposium TB – Technical Briefings Nix – New Ideas track PWG – PhD Working Groups
 Rx – Research track
 lx – Industrial track TDX – Tool Demonstrations

Notes:

The detailed program of the workshops and the co-located 3rd International Symposium on Search Based Software Engineering (SSBSE 2011) can also be found in this booklet, see for an overview on page 10, and for the details following it.

The ICSE Steering Committee meeting will take place on Tuesday from 17:30-20:00 in the Meeting room.
 The FSE Steering Committee meeting will take place on Friday during lunchtime in the Meeting room.
 The distinguished papers  and artifact papers  are marked in the program.

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On behalf of the entire Organizing Committee it is our great pleasure to welcome you to the 8th joint meeting of the European Software Engineering Conference and the ACM SIGSOFT Symposium on the Foundations of Software Engineering, an internationally renowned forum for researchers, practitioners, and educators to present and discuss the most recent innovations, trends, experiences, and challenges in the field of software engineering.

Every second year FSE is jointly organized with ESEC on the Old Continent of Europe. This year's host city is Szeged in the South of Hungary. Szeged, which has always been referred to as the city of sunshine, is simply beautiful and has an atmosphere that no other city has in Hungary. Its sights, like the Votive church, the Synagogue, the Hero's Arch, and the University of Szeged all give a distinct character to the town. From September until late June, the local cafés, restaurants, shops, and streets are all noisy from the lively bustle of university students and the whole town is turned into a nest of youthful spirit. Let us invite you to be part of this unique atmosphere and enjoy your stay during the ESEC/FSE 2011 Conference.

This year's program promises to be very exciting. The research track call for papers attracted 203 papers from all continents. After extensive virtual and physical discussions, the Program Committee accepted 34 papers covering a large variety of software engineering topics – ranging from mining software archives and empirical studies over program analysis and testing to collaboration, models, and requirements. Three papers received an ACM SIGSOFT Distinguished Paper Award.

With this ESEC/FSE, we especially wanted to encourage authors to provide artifacts – tools or data sets that would help others to build on earlier work. A third of the authors of accepted papers submitted artifacts, judged and assessed by an Artifact Evaluation Board. Authors were enthusiastic about participating and eager to improve their packages, further motivated by a 1,000 US\$ Best Artifact Award from Microsoft Research. Overall, seven artifacts were found to meet or exceed expectations, and thus are especially recommended by the Board as a base for future research.

The whole-day industrial track is another newly added element of the ESEC/FSE program with the purpose to facilitate an open exchange of ideas between academic researchers and practitioners in industry. ESEC/FSE 2011 will also feature Technical Briefings, an all-day event for communicating the state of topics related to software engineering. This year's conference also offers a comprehensive student program, including the Doctoral Symposium, the Technical Briefings and the PhD Working Groups (PWGs). PWGs are offered for PhD students and other young (pre-doc) researchers with the aim of providing them with the opportunity to meet prominent senior researchers in certain software engineering fields and work with them throughout the conference week.

Organizing such a complex event as ESEC/FSE 2011 has been a team effort. First, we would like to thank the authors for providing the content of the program. We deeply appreciate the hard work of the program committees of several tracks when reviewing papers and providing feedback for authors. We would also like to express my gratitude to the University of Szeged for hosting the conference, our sponsors ACM and SIGSOFT, and our generous corporate supporters: Microsoft Research, Ericsson, DEAK Zrt., IBM Research, and FrontEndART Software. Last but not least, let us thank the organizing committee for their effort and dedicated work in putting together ESEC/FSE 2011.



Tibor Gyimóthy

*ESEC/FSE 2011 General Chair
University of Szeged, Hungary*



Andreas Zeller

*ESEC/FSE 2011 Program Chair
Saarland University, Saarbrücken, German*

General Chair

Tibor Gyimóthy
University of Szeged, Hungary

Program Chair

Andreas Zeller
Saarland University, Germany

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Henry Muccini
University of L'Aquila, Italy
Marsha Chechik
University of Toronto, Canada

Doctoral Symposium Chairs

Mark Harman
University College London, UK
Antonia Bertolino
ISTI-CNR, Italy

Phd Working Groups Chair

Árpád Beszédés
University of Szeged, Hungary

Industrial Track Chairs

Frank Tip
IBM Research, USA
Volker Gruhn
Universität Duisburg-Essen, Germany

New Ideas Track Chair

Martin Robillard
McGill University, Canada

Tool Demonstrations Track Chairs

Michele Lanza
University of Lugano, Switzerland
Anthony Cleve
University of Namur & Université Libre de Bruxelles, Belgium

Technical Briefings Track Chair

Lionel Briand
Simula Research Laboratory, Norway
Artifact Evaluation Chairs
Shriram Krishnamurthi
Brown University, USA
Carlo Ghezzi
Politecnico di Milano, Italy

Publicity Chair

Andrian Marcus
Wayne State University, USA

Local Organization Chairs

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University of Szeged, Hungary
László Vidács
University of Szeged, Hungary

Publications Chair

Gordon Fraser
Saarland University, Germany

Web Chair

László Vidács
University of Szeged, Hungary

Conference Arrangements

Patricia Frittmann
University of Szeged, Hungary

Program Committee:

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Shriram Krishnamurthi (Brown University, USA)
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Aditya Nori (Microsoft Research, India)
Corina Pasareanu (NASA, USA)
Mauro Pezze (University of Lugano, Switzerland, and University of Milano, Italy)
Klaus Pohl (University of Essen-Duisburg, Germany)
Martin Robillard (McGill University, Canada)
Wilhelm Schaefer (University of Paderborn, Germany)
Yannis Smaragdakis (University of Athens, Greece, and University of Massachusetts, USA)
Margaret-Anne Storey (University of Victoria, Canada)
Zhendong Su (University of California, Davis, USA)
Mandana Vaziri (IBM Research, USA)



Building Advanced Mechatronic Systems

Wilhelm Schäfer

University of Paderborn, Germany

Wednesday, 9:30, Congress Hall

Mechatronics is the engineering discipline concerned with the construction of systems incorporating mechanical, electrical and information technology components. Typical examples of mechatronic systems are automotive applications, e.g. advanced braking systems, fly/steer-by-wire or active suspension techniques, but also DVD-players or washing machines. Mechatronic systems are characterised by a combination of basic mechanical devices with a processing unit monitoring and controlling it via a number of actuators and sensors. This leads to massive improvements in product performance and flexibility. The introduction of mechatronics as a tight integration of mechanical, electrical and information-driven units allowed for turning conventionally designed mechanical components into smart devices.

In the talk we survey current state of the art in the development of mechatronic systems from a software engineering point of view. Based on identified weaknesses of existing approaches we present our own approach called Mechatronic UML. Mechatronic UML supports model-driven development of mechatronic systems addressing complex coordination between system components under hard real-time constraints and reconfiguration of control algorithms at runtime to adjust the system behaviour to changing system goals as well as target platform specific code generation. Modelling is based on a syntactically and semantically rigorously defined and partially refined subset of UML. It uses a slightly refined version of component diagrams, coordination patterns, and a refined version of state charts including the notion of time which are called Real time state charts. Verification of safety properties is based on a special kind of compositional model checking to make it scalable. Model checking exploits an underlying unifying semantics which is formally defined using graph transformation systems. The last part of the talk is devoted to pointing out future developments and research challenges which we believe characterise advanced mechatronic systems of the future.

Dr. Wilhelm Schäfer, born August 16th 1954, got his PhD degree 1986 in the area of software engineering from the University of Osnabrück, Germany. 1986 -1987 he spent as a Visiting Assistant Professor at McGill University Montreal, Canada. From 1986 to 1990 he was head of research and development at STZ company for Software Technology Ltd., Dortmund. From 1991 to 1994 he was Associate Professor, Department of Computer Science, University of Dortmund. Since 1994 he is full professor and chair, head of Software Engineering Group, Department of Computer Science, University of Paderborn. Prof. Schäfer is also the chair of the International Graduate School of the University of Paderborn and deputy chair of the collaborative research centre (CRC 614 Self-Optimization in Mechanical Engineering). He was and is member of many national and international program committees in software engineering. He was a member of the IEEE Transactions on Software Engineering Editorial Board, PC-Chair of the 5th European Software Engineering Conference (ESEC), Barcelona in 1995, PC Co-Chair of the 23rd International Conference on Software Engineering in Toronto in 2001 and General Chair of the 30th International Conference on Software Engineering in Leipzig in 2008. Since 2010 he is Co-Director of the newly founded Fraunhofer group on Mechatronic System Design in Paderborn and also serves as Vice-President Research of the University of Paderborn since 2003. His main research interests are in Model-based Development of Embedded and Mechatronic Systems, Re-Engineering and Software Process Modeling as well as Version- and Configuration Management.

ELI-ALPS - The Ultrafast Challenges in Hungary

Gábor Szabó

University of Szeged, Hungary

Thursday, 9:00, Congress Hall



The ELI – Extreme Light Infrastructure – or as it is commonly referred to: the SUPERLASER will be one of the large research facilities of the European Union. ELI will be built with a joint international effort to form an integrated infrastructure comprised of three branches. The ELI Beamline Facility (Prague, Czech Republic) will mainly focus on particle acceleration and X-ray generation, while the ELI Nuclear Physics Facility (Magurele, Romania) will be dealing with laser-based nuclear physics as well as high field physics. In the talk we introduce the ELI Attosecond Light Pulse Source (ELI-ALPS) to be built in Szeged, Hungary.

The primary mission of the ELI-ALPS Research Infrastructure is to provide the international scientific community with a broad range of ultrafast light sources, especially with coherent XUV and X-ray radiation, including single attosecond pulses. Thanks to this combination of parameters never achieved before, energetic attosecond X-ray pulses of ELI-ALPS will enable recording freeze-frame images of the dynamical electronic-structural behaviour of complex atomic, molecular and condensed matter systems, with attosecond-picometer resolution. The secondary purpose is to contribute to the scientific and technological development towards generating 200 PW pulses, being the ultimate goal of the ELI project. ELI-ALPS will be operated also as a user facility and hence serve basic and applied research in physical, chemical, material and biomedical sciences as well as industrial applications.

The Facility will be built by the end of 2015 from a budget exceeding 240M€. The building and the IT infrastructure, from high speed internal networking, remote controlled system alignment, targetry and data acquisition through laser and radiation safety tools until security systems, will challenge the state of the art of similar research facilities.

Gábor Szabó received his MS and PhD degrees in physics from JATE University, Szeged, Hungary, in 1978 and 1981, respectively. From 1978 to the present he has been working at University of Szeged where he has been a full professor in the Department of Optics and Quantum Electronics since 1994. Since 2010 he has been the rector of the University of Szeged. He has also visited scientists at both Max Planck Institute, Göttingen, Germany, and Rice University, Houston, Texas. Dr. Szabó is a member of the Hungarian Physical Society, he is the chairman of the Hungarian Association for Innovation, and has been a member of Hungarian Academy of Sciences since 2010. His research activities include photoacoustic spectroscopy, ultrafast laser spectroscopy, generation of femtosecond pulses, nonlinear optics, optimum control of quantum systems, medical applications of lasers.



Ten Years of Interface Automata

Thomas A. Henzinger

University of California, Berkeley, USA

Luca de Alfaro

University of California, Santa Cruz, USA

Thursday, 9:45, Congress Hall



We survey the last decade's research on interface automata and related formalisms, with special emphasis on non-functional aspects of interfaces (real time, power consumption) and on the automatic synthesis of software component interfaces.

Thomas A. Henzinger is President of IST Austria (Institute of Science and Technology Austria) and Adjunct Professor of Electrical Engineering and Computer Sciences at the University of California, Berkeley. He holds a Dipl.-Ing. degree in Computer Science from Kepler University in Linz, Austria, an M.S. degree in Computer and Information Sciences from the University of Delaware, and a Ph.D. degree in Computer Science from Stanford University (1991). He was Assistant Professor of Computer Science at Cornell University (1992-95), Assistant Professor (1996-97), Associate Professor (1997-98), and Professor (1998-2004) of Electrical Engineering and Computer Sciences at the University of California, Berkeley. He was also Director at the Max-Planck Institute for Computer Science in Saarbruecken, Germany (1999) and Professor of Computer and Communication Sciences at EPFL in Lausanne, Switzerland (2004-09). His research focuses on modern systems theory, especially models, algorithms, and tools for the design and verification of reliable software, hardware, and embedded systems. His HyTech tool was the first model checker for mixed discrete-continuous systems. He is an ISI highly cited researcher, a member of Academia Europaea, a member of the German Academy of Sciences (Leopoldina), a member of the Austrian Academy of Sciences, a Fellow of the ACM, a Fellow of the IEEE, and the recipient of an ERC Advanced Investigator Grant.

Luca de Alfaro is a professor of Computer Science at the University of California, Santa Cruz.



Software Architecture: Reflections on an Evolving Discipline

Mary Shaw and David Garlan

Carnegie Mellon University, USA

Friday, 9:00, Congress Hall



Software Architecture: Reflections on an Evolving Discipline

Software Architecture emerged in the 1990's as an important sub-field of software engineering. While good architectural design had long been recognized as critical to the success of any complex software system, before then the practice of architecting had relied largely on ad hoc, uncodified, and idiosyncratic techniques and knowledge. By the 2000's the field had matured to the point where there were widely-recognized taxonomies of architectural patterns, techniques for formally representing and analyzing architectures, methods for reviewing an architectural design, widespread adoption of architectural product lines and composition frameworks, and techniques for ensuring conformance between an architecture and an implementation of it. In this talk we reflect on the key enablers of a discipline of software architecture that led to these advances, the central ideas that form its core, and its enduring principles that continue to shape the field of software engineering. We consider both the important concepts on which it builds, as well as those that have built on top of it. Finally, we examine some of the important new trends and challenges that are likely to have an impact on how software architecture will evolve in the future.

Mary Shaw is the Alan J. Perlis University Professor of Computer Science at Carnegie Mellon University, where she has been a member of the faculty since completing her PhD in 1972. Her research interests lie in the area of software engineering and software systems, particularly software architecture, end user software engineering, cybersociotechnical systems, and software design. She is co-author of "Software Architecture: Perspectives on an Emerging Discipline" and is considered to be one of the founders of the field of software architecture. She has received the ACM SIGSOFT Outstanding Research AWARD, the IEEE Computer Society TCSE's Distinguished Educator Award, CSEE&T's Nancy Mead Award for Excellence in Software Engineering Education, the Stevens Award, and the Warnier Prize. She is a fellow of the Association for Computing Machinery (ACM), the Institute for Electrical and Electronics Engineers (IEEE) and the American Association for the Advancement of Science (AAAS), and she is a member of IFIP WG 2.10 on Software Architecture. She is a past member of the National Research Council's Computer Science and Telecommunications Board and the Defense Advanced Research Project Agency's Information Science and Technology Board.

David Garlan is a Professor of Computer Science and Director of Software Engineering Professional Programs in the School of Computer Science at Carnegie Mellon University. He received his Ph.D. from Carnegie Mellon in 1987 and worked as a software architect in industry between 1987 and 1990. His interests include software architecture, self-adaptive systems, formal methods, and cyber-physical systems. He is considered to be one of the founders of the field of software architecture, and, in particular, formal representation and analysis of architectural designs. He is a co-author of two books on software architecture: "Software Architecture: Perspectives on an Emerging Discipline", and "Documenting Software Architecture: Views and Beyond." In 2005 he received a Stevens Award Citation for "fundamental contributions to the development and understanding of software architecture as a discipline in software engineering."

ESEC/FSE 2011 Pre & post events	8:00-9:00		9:00-10:30		11:00-12:30		2:00-3:30		4:00-5:30		5:30-6:00	
	AM		AM		AM		PM		PM		PM+	
	4 Sep Sunday		5 Sep Monday		6 Sep Tuesday		7-9 Sep		10-12 Sep Sat - Mon			
	ASAS		ASAS		IWPSE-EVOL		IWPSE-EVOL		PASTE		PASTE	
	WoSQ		WoSQ		Web-QUeST		Web-QUeST		SSE		SSE	
	DS		DS		IWPSE-EVOL		IWPSE-EVOL		SSE		SSE	
	PWG		PWG		TB		TB		SSE		SSBSE	
	PWG		PWG		TB		TB		Main conf.		Main conf.	
	PWG		PWG		TB		TB		Main conf.		Main conf.	
	PWG		PWG		TB		TB		Main conf.		Main conf.	
	PWG		PWG		TB		TB		Main conf.		Main conf.	
	PWG		PWG		TB		TB		Main conf.		Main conf.	

- WoSQ 2011** <http://sites.google.com/site/wosq2011/>
 Sunday, September 4 9:00 - 17:30
International Workshop on Software Quality
 Organizers: Stefan Wagner, Sunita Chulani and Bernard Wong
- ASAS 2011** <http://asas.dei.uc.pt/>
 Sunday, September 4 9:00 - 17:30
Workshop on Assurances for Self-Adaptive Systems
 Organizers: Javier Cámara, Rogério De Lemos, Carlo Ghezzi and Antónia Lopes
- IWPSE-EVOL 2011** <http://pleiad.cl/iwpse-evol/>
 Monday-Tuesday, September 5-6 9:00 - 17:30
12th International Workshop on Principles on Software Evolution and 7th ERCIM Workshop on Software Evolution
 Organizers: Romain Robbes and Anthony Cleve
- PASTE 2011** <http://sites.google.com/site/paste2011/>
 Monday, September 5 9:00 - 17:30
10th ACM SIGPLAN-SIGSOFT Workshop on Program Analysis for Software Tools and Engineering
 Organizers: Jeff Foster and Lori Pollock
- SSE 2011** <http://www1.in.tum.de/static/sse11/>
 Monday, September 5 9:00 - 17:30
4th International Workshop on Social Software Engineering
 Organizers: Walid Maalej and Raian Ali
- WebQUeST 2011** https://researcher.ibm.com/researcher/view_project.php?id=2426
 Tuesday, September 6 9:00 - 17:30
Web Quality, Security, and Testing
 Organizers: Julian Dolby, John Field, Mangala Gowri and Benjamin Livshits
- SSBSE 2011** <http://www.ssbse.org/2011/>
 Saturday-Monday, September 10-12 9:00 - 17:30
The 3rd International Symposium on Search Based Software Engineering
 Co-located event

WOSQ - 8TH INTERNATIONAL WORKSHOP ON SOFTWARE QUALITY

SUNDAY, SEPTEMBER 4

Welcome	9:00 - 9:30
	Seminar room 2
The Impact of ICT Evolution and Application Explosion on Software Quality	9:30 - 10:30
<i>Keynote address by Motoei Azuma, Session Chair: Stefan Wagner</i>	Seminar room 2
Coffee break	10:30 - 11:00
	Atrium
Quality Models and Process Improvement	11:00 - 12:30
<i>Session Chair: Stefan Wagner</i>	Seminar room 2
A Unifying Model for Software Quality	
<i>K. Lochmann, A. Goeb</i>	
Do Software Process Improvements Lead to ISO 9126 Architectural Quality Factor Improvement?	
<i>M. Lavallee, P. Robillard</i>	
A Software Quality Model for SOA	
<i>K. Lochmann, A. Goeb</i>	
Lunch	12:30 - 14:00
	Exhibition area
Quality and Metrics	14:00 - 15:30
<i>Session Chair: Klaus Lochmann</i>	Seminar room 2
An Explanatory Analysis on Eclipse Beta-Release Bugs Through In-Process Metrics	
<i>A. Tosun Misirli, B. Murphy, T. Zimmermann, A. Bener</i>	
Introduction of Japan's Investigation Activities on Systems and Software Product Quality Metrics	
<i>M. Yamamuro, Y. Tanitsu, T. Komiyama, M. Azuma</i>	
The Use of Application Scanners in Software Product Quality Assessment	
<i>Stefan Wagner</i>	
Coffee break	15:30 - 16:00
	Atrium
Data Quality and Discussion	16:00 - 17:30
<i>Session Chair: Stefan Wagner</i>	Seminar room 2
A Process for Assessing Data Quality Group or plenary discussion	
<i>H. Sneed, R. Majnar</i>	

Closing

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ASAS - WORKSHOP ON ASSURANCES FOR SELF-ADAPTIVE SYSTEMS

SUNDAY, SEPTEMBER 4

Welcome	9:00 - 9:30
	Seminar room 3
RV: A Runtime Verification Framework for Monitoring, Prediction and Mining	9:30 - 10:30
<i>Keynote Address by Grigore Rosu</i>	Seminar room 3
Coffee break	10:30 - 11:00
	Atrium
Run-time Assurances	11:00 - 12:30
	Seminar room 3
When the Requirements for Adaptation and High Integrity Meet	
<i>Radu Calinescu</i>	
Model checking Requirements at run-time in Adaptive systems	
<i>Marco Mori and Paola Inverardi</i>	
Robust-and-evolvable Resilient Software Systems -- Open Problems and Lessons Learned	
<i>Vincenzo De Florio</i>	
Lunch	12:30 - 14:00
	Exhibition area
Failure Analysis	14:00 - 15:30
	Seminar room 3
Towards Accurate Failure Prediction for the Proactive Adaptation of Service-oriented Systems	
<i>Andreas Metzger</i>	
Using Feature Locality: Can We Leverage History to Avoid Failures During Reconfiguration?	
<i>Brady Garvin, Myra Cohen, and Matthew Dwyer</i>	
Component -based Timed Hazard Analysis of Self-healing Systems	
<i>Claudia Priesterjahn, Dominik Steenken, and Matthias Tichy</i>	
Coffee break	15:30 - 16:00
	Atrium
Discussion	16:00 - 17:30
Leveraging assurances by merging development-time and run-time evidence	Seminar room 3
Wrap up	

ESEC/FSE 2011

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MONDAY, SEPTEMBER 5

Welcome	9:00 - 9:30
	Seminar room 2
Session 1: Parallelism and dynamic evolution	9:30 - 10:30
Challenges of Evolving Sequential to Parallel Code: An Exploratory Study	Seminar room 2
<i>Anne Meade and J.J. Collins</i>	
Run-time Phenomena in Dynamic Software Updating: Causes and Effects	
<i>Allan Gregersen and Bo Jørgensen</i>	
Coffee break	10:30 - 11:00
	Atrium / Exhibition area
Session 2: Requirements, traceability, and dependencies	11:00 - 12:30
	Seminar room 2
Requirements evolution drives software evolution	
<i>Neil A. Ernst and John Mylopoulos</i>	
Towards a Benchmark for Traceability	
<i>Eya Ben Charrada, David Caspar, Cédric Jeanneret and Martin Glinz</i>	
Logical Dependencies Origins: A Case Study	
<i>Gustavo Ansaldi Oliva, Francisco Santana, Marco Gerosa and Cleidson De Souza</i>	
Lunch	12:30 - 14:00
	Exhibition area
Session 3: Change analysis and bug prediction	14:00 - 15:30
	Seminar room 2
A Taxonomy for Software Change Analysis	
<i>Steffen Lehnert</i>	
Using the Gini Coefficient for Bug Prediction in Eclipse	
<i>Emanuel Giger, Martin Pinzger and Harald Gall</i>	
Are the classes that use exceptions defect prone?	
<i>Cristina Marinescu</i>	
Coffee break	15:30 - 16:00
	Atrium / Exhibition area
Event in Memory of Manny Lehman: Talk by Nazim Madhavji	16:00 - 17:30
	Seminar room 2

TUESDAY, SEPTEMBER 6

Welcome	9:00 - 10:30
	Seminar room 2
Keynote Address by Prem Devanbu	
Coffee break	10:30 - 11:00
	Atrium / Exhibition area
Session 4: Empirical studies	11:00 - 12:30
Causes of Premature Aging during Software Development: An Observational Study	Seminar room 2
<i>Mathieu Lavallee and Pierre Robillard</i>	
Network Analysis of OSS evolution: An Empirical Study on ArgoUML Project	
<i>Wen Zhang</i>	
User generated (web) content: trash or treasure	
<i>Giovanni Alluvatti, Andrea Capiluppi, Giuseppe De Ruvo and Marco Molfetta</i>	
Lunch	12:30 - 14:00
	Exhibition area
Session 4: Empirical studies (continued)	14:00 - 14:30
Measuring Multi-language Software Evolution: A Case Study	Seminar room 2
<i>Tom Arbuckle</i>	
Session 5: Tool demonstrations	14:30 - 15:30
Historage: Fine-grained Version Control System for Java	
<i>Hideaki Hata, Osamu Mizuno and Tohru Kikuno</i>	
An Editing-operation Replayer with Highlights Supporting Investigation of Program Modifications	
<i>Takayuki Omori and Katsuhisa Maruyama</i>	
Coffee break	15:30 - 16:00
	Atrium / Exhibition area
Session 6: Architecture and model evolution	16:00 - 17:30
Problem-Solution Mapping for Forward and Reengineering on Architectural Level	Seminar room 2
<i>Matthias Riebisch, Stephan Bode and Robert Brcina</i>	
Challenges in Model-Based Evolution and Merging of Access Control policies	
<i>Lionel Montrieux, Michel Wermelinger and Yijun Yu</i>	
An agent-based framework for distributed collaborative model evolution	
<i>Hoa Khanh Dam and Aditya Ghose</i>	
Closing	17:30 - 18:00

MONDAY, SEPTEMBER 5

Program Synthesis for Automating End-user Programming and Education	9:00 - 10:30
<i>Keynote Address by Sumit Gulwani</i>	Seminar room 1
Coffee break	10:30 - 11:00
	Atrium / Exhibition area
Session 1: Technical papers	11:00 - 12:30
	Seminar room 1
Labeling Library Functions in Stripped Binaries	
<i>Emily R. Jacobson, Nathan Rosenblum, Barton P. Miller</i>	
Anywhere, Any-Time Binary Instrumentation	
<i>Andrew R. Bemat, Barton P. Miller</i>	
Toward Systematic, Comprehensive Trace Generation for Behavioral Pattern Detection through Symbolic Execution	
<i>Markus von Detten</i>	
Lunch	12:30 - 14:00
	Exhibition area
Session 2: Technical papers	14:00 - 15:30
	Seminar room 1
An Evaluation of Change-Based Coverage Criteria	
<i>Marc Fisher II, Jan Wloka, Frank Tip, Barbara G. Ryder and Alexander Luchansky</i>	
Locating Failure-Inducing Environment Changes	
<i>Dawei Qi, Minh Ngoc Ngo, Tao Sun, Abhik Roychoudhury</i>	
Assessing Modularity via Usage Changes	
<i>Yana Momchilova Mileva, Andreas Zeller</i>	
Coffee break	15:30 - 16:00
	Atrium / Exhibition area
Flexible time	16:00 - 17:30
<i>5-minute madness, demos, discussion, etc</i>	Seminar room 1

MONDAY, SEPTEMBER 5

Welcome	9:00 - 9:10
	Seminar room 3
Invited Talk	9:10 - 9:45
How Social Media Artifacts Support Collaborative Software Development?	Seminar room 3
<i>Keynote address by Christoph Treude</i>	
Social Requirements Engineering	9:45 - 10:30
Online Social Networks as a Catalyst for Software and IT Innovation	Seminar room 3
<i>Leif Singer, Norbert Seyff and Samuel A. Fricker</i>	
Towards Systematic Analysis of Continuous User Input	
<i>Dennis Pagano</i>	
Coffee break	10:30 - 11:00
	Atrium/ Exhibition area
Empirical Studies on Social and Human Aspects	11:00 - 12:30
On the Interplay between Software Architects and Software Engineers in an Agile Environment: Who Should Do What?	Seminar room 3
<i>Antony Tang, Ton Gerrits, Peter Nacken and Hans Van Vliet</i>	
The Learning Component in Social Software Engineering	
<i>Pierre Robillard</i>	
Extending Socio-technical Congruence with Awareness Relationships	
<i>Irwin Kwan and Daniela Damian</i>	
Lunch	12:30 - 14:00
	Exhibition area
Collaboration, Communication, and Awareness	14:00 - 15:30
Engineering Software Engineering Teams	Seminar room 3
<i>Patrick Wagstrom</i>	
Socially Mediated Technology Awareness	
<i>Thomas Fritz and Gail Murphy</i>	
Augmenting Social Awareness in a Collaborative Development Environment	
<i>Fabio Calefato, Filippo Lanubile, Nicola Sanitè and Giuseppe Santoro</i>	
Secret Ninja Testing with HALO Software Engineering	
<i>Jonathan Bell, Swapneel Sheth and Gail Kaiser</i>	
Coffee break	15:30 - 16:00
	Atrium / Exhibition area
Round Table Discussion	16:00 - 17:00
	Seminar room 3
Summary of discussion, feedback, and closing	17:00 - 17:30
Social Event (http://www.regihid.hu/en/)	19:30

MONDAY, SEPTEMBER 5

How to perform a reliable software engineering empirical study <i>Invited talk by Prem Devanbu</i>	9:00 - 9:30 Lecture room 1
DS1 - Development documentation Mining Development Repositories To Study the Impact of Collaboration on Software Systems <i>Nicolas Bettenburg</i>	9:30 - 10:30 Lecture room 1
Reputation-based Self-management of Software Process Artifact Quality in Consortium Research Projects <i>Christian Prause</i>	
An architecture-centric approach for goal-driven requirements elicitation <i>Zoya Durdik</i>	
Coffee break	10:30 - 11:00 Atrium / Exhibition area
DS2 - Specification mining Experimental Specification Mining for Enterprise Applications <i>Matthias Schur</i>	11:00 - 11:40 Lecture room 1
Search Based Hierarchy Generation for Reverse Engineered State Machines <i>Mathew Hall</i>	
DS - Closed discussion of morning presentations	11:40 - 12:30 Lecture room 1
Lunch	12:30 - 14:00 Exhibition area
How to write an excellent software engineering paper <i>Invited talk by Laurie Williams</i>	14:00 - 14:30 Lecture room 1
DS3 - Testing Automatic Test Suite Evolution <i>Mehdi Mirzaaghaei</i>	14:30 - 15:30 Lecture room 1
Automatic Structural Testing with Abstraction Refinement and Coarsening <i>Mauro Baluda</i>	
Understanding Failures Through Facts <i>Jeremias Rößler</i>	
Coffee break	15:30 - 16:00 Atrium / Exhibition area
DS4 - Adaptation QoS Verification and Model Tuning @ Runtime <i>Antonio Filleri</i>	16:00 - 16:40 Lecture room 1
A Software Lifecycle Process for Context-aware Adaptive Systems <i>Marco Mori</i>	
DS - Closed discussion of afternoon presentations	16:40 - 17:30 Lecture room 1

	Monday, September 5
Welcome, introduction of the organizers and the groups	17:30 - 18:30 Lecture room 1 Evening
<i>Social event</i>	
	Tuesday, September 6
Individual work meetings of the groups	17:30 - 18:30 Lecture room 1-2 Evening
<i>Social event</i>	
	Wednesday, September 7
Individual work activities	9:00 - 17:30 Exhibition area Evening
<i>Social event</i>	
	Thursday, September 8
Individual work activities	9:00 - 17:30 Exhibition area
	Friday, September 9
Individual work activities	9:00 - 14:00 Exhibition area
	Friday, September 9
Presentations of the results	14:00 - 14:30 Congress hall
	Friday, September 9
Individual demonstrations	14:30 - 15:30 Exhibition area
	Friday, September 9
Announcements of the results on the closing session	17:00 - 17:30 Congress hall

TUESDAY, SEPTEMBER 6

TUESDAY, SEPTEMBER 6

Technical Briefings 1	9:00 - 10:30
Management of Unstructured Information during Software Evolution: Applications of Text Retrieval	Lecture room 1
<i>Andrian Marcus</i>	
Technical Briefings 2	9:00 - 10:30
Multicore Software engineering	Lecture room 2
<i>Victor Pankratius</i>	
Coffee break	10:30 - 11:00
	Atrium / Exhibition area
Technical Briefings 3	11:00 - 12:30
Text Analytics for Software Engineering: Applications of Natural Language Processing	Lecture room 1
<i>Lin Tan, Tao Xie</i>	
Technical Briefings 4	11:00 - 12:30
Model-based Emergent Middleware to Meet the Challenges of Interoperability in Pervasive Networks	Lecture room 2
<i>Valérie Issarny</i>	
Lunch	12:30 - 14:00
	Exhibition area
Technical Briefings 5	14:00 - 15:30
Source code licensing as an essential aspect of modern software development	Lecture room 1
<i>Daniel German, Massimiliano Di Penta</i>	
Technical Briefings 6	14:00 - 15:30
Self-healing software systems	Lecture room 2
<i>Mauro Pezze</i>	
Coffee break	15:30 - 16:00
	Atrium / Exhibition area
Technical Briefings 7	16:00 - 17:30
Applying Domain Analysis Methods in Agile Development	Lecture room 1
<i>Sarunas Marciuska, Salvatore Alessandro Sarcia, Alberto Sillitti, Giancarlo Succi</i>	
Technical Briefings 8	16:30 - 17:30
Search Based Software Engineering: Automating Software Engineering (This talk is free for all ESEC/FSE and SSBSE participants. Supported by SSBSE.)	Lecture room 2
<i>Mark Harman</i>	

Session 1 - Mozilla	9:00 - 10:30
Introduction and Welcome	Seminar room 3
<i>Organizers</i>	
Security challenges for the web platform	
<i>David Herman</i>	
Vetting Browser Extensions for Security Vulnerabilities with VEX	
<i>Sruthi Bandhakavi (Presented by Julian Dolby)</i>	
Discussion - Possible topic: what could be added to the browser to aid security	
Coffee break	10:30 - 11:00
	Atrium / Exhibition area
Session 2 - Tools	11:00 - 12:30
Providing Tool Support for JavaScript Programmers -	Seminar room 3
<i>Anders Moeller</i>	
Discussion - Possible topics: static analysis issues for client- and server-side Web software; whether/how to do refactorings to fix security issues	
Lunch	12:30 - 14:00
	Exhibition area
Session 3 - Learning and Microsoft	14:00 - 15:30
Detecting and Analyzing Web-based Malware via Statistical Learning Techniques -	Seminar room 3
<i>Marco Cova</i>	
Finding Malware on a Web Scale	
<i>Benjamin Livshits:</i>	
Discussion - Possible topic: integrating the learning techniques into browsers, and whether it would be possible to do static analysis to approximate the dynamic properties learning can find.	
Coffee break	15:30 - 16:00
	Atrium / Exhibition area
Session 4 - IBM security analyses	16:00 - 17:30
Information-flow Security: Moving Beyond Graph Reachability	Seminar room 3
<i>Omer Tripp</i>	
Using Taint Analysis to Detect Vulnerabilities in Web Sites	
<i>Salvatore Guarneri</i>	
Discussion - Possible topic: around what are the key challenges to improve real-world tools	
Wrap up	17:30 - 18:00
	Seminar room 3

Opening session

9:00 - 9:30

Congress hall

Building Advanced Mechatronic Systems

9:30 - 10:30

Keynote address by Wilhelm Schäfer

Congress hall

Coffee break

10:30 - 11:00

Foyer

Research track 1 - Bugs and Changes

11:00 - 12:30

Session chair: Rudolf Ferenc

Congress hall

Don't Touch My Code! Examining the Effects of Ownership on Software Quality

Christian Bird, Nachiappan Nagappan, Brendan Murphy, Harald Gall and Premkumar Devanbu

ReLink: Recovering Links between Bugs and Changes

Rongxin Wu, Hongyu Zhang, Sunghun Kim and Shing-Chi Cheung

How Do Fixes Become Bugs? -- A Comprehensive Characteristic Study on Incorrect Fixes in Commercial and Open Source Operating Systems

 Zuoning Yin, Ding Yuan, Yuanyuan Zhou, Shankar Pasupathy and Lakshmi Bairavasundaram

Research track 2 - Models and Requirements

11:00 - 12:30

Session chair: Martin Glinz

Lecture room 2

CSSL: A Logic for Specifying Conditional Scenarios

 Shoham Ben-David, Marsha Chechik, Arie Gurfinkel and Sebastian Uchitel

Using an SMT Solver for Interactive Requirements Prioritization

Francis Palma, Angelo Susi and Paolo Tonella

Modeling the HTML DOM and Browser API in Static Analysis of JavaScript Web Applications

Simon Holm Jensen, Magnus Madsen and Anders Møller

Industrial track 1 - Software Development

11:00 - 12:30

Development and Operations - Two Worlds Collide (Keynote)

Lecture room 1

Eberhard Wolff

Does Pair Programming Increase Developers Attention?

Ilenia Fronza, Alberto Sillitti and Giancarlo Succi, Jelena Vlasenko

A True Story of Refactoring a Large Oracle PL/SQL Banking System

Csaba Nagy, Rudolf Ferenc and Tibor Bakota

Lunch

12:30 - 14:00

Lecture hall

Research track 3 - Empirical Studies

14:00 - 15:30

Session chair: Martin Robillard

Congress hall

The Onion Patch: Migration in Open Source Ecosystems

Corey Jergensen, Anita Sarma and Patrick Wagstrom

Does Adding Manpower Also Affect Quality? An Empirical, Longitudinal Analysis

Andrew Meneely, Pete Rotella and Laurie Williams

Effective Communication of Software Development Knowledge Through Community Portals

Christoph Treude and Margaret-Anne Storey

Research track 4 - Analysis I

14:00 - 15:30

Session chair: TBA

Lecture room 2

Proving Programs Robust

 Swarat Chaudhuri, Sumit Gulwani, Roberto Lubliner and Sara Naidipour

Checking Conformance of a Producer and a Consumer

Evan Driscoll, Amanda Burton and Thomas Reps

Managing Performance vs. Accuracy Trade-offs With Loop Perforation

Stelios Sidiropoulos, Sasa Misailovic, Hank Hoffman and Martin Rinard

Industrial track 2 - Software Systems and Services

14:00 - 15:30

Productivity in IT services (Keynote)

Satish Chandra

Lecture room 1

Hybrid Analysis for JavaScript Security Assessment

Omer Tripp and Omri Weisman

Automotive System Development Based on Collaborative Modeling Using Multiple ADLs

Shin'ichi Shiraishi and Mutsumi Abe

Coffee break

15:30 - 16:00

Foyer

Research track 5 - Debugging

16:00 - 17:30

Session chair: Mark Harman

Congress hall

Partial Replay of Long-Running Applications

Alvin Cheung, Armando Solar-Lezama and Sam Madden

Mitigating the Confounding Effects of Program Dependences for Effective Fault Localization

George Baah, Andy Podgurski and Mary Jean Harrold

Fault Localization for Data-Centric Programs

Diptikalyan Saha, Mangala Gowri Nanda, Pankaj Dhoolia, V. Krishna Nandivada, Vibha Sinha and Satish Chandra

WEDNESDAY, SEPTEMBER 7


Research track 6 - Collaboration

16:00 - 17:30

Session chair: Henry Muccini

Lecture room 2

Proactive Detection of Collaboration Conflicts

 Yuriy Brun, Reid Holmes, Michael Ernst and David Notkin

ADDiff: Semantic Differencing for Activity Diagrams

 Shahar Maoz, Jan Oliver Ringert and Bernhard Rumpe

Semistructured Merge: Rethinking Merge in Revision Control Systems

Sven Apel, Jörg Liebig, Benjamin Brandl, Christian Lengauer and Christian Kaestner

Industrial track 3 - Software Testing

16:00 - 17:30

Concolic Testing on Embedded Software - Case Studies on Mobile Platform Programs

Lecture room 1

Yunho Kim, Moonzoo Kim and Yoonkyu Jang

Managing Performance Testing With Release Certification and Data Correlation

Tuli Nivas and Christoph Csallner

Faster Fault Finding at Google using Multi Objective Regression Test Optimisation

Shin Yoo, Robert Nilsson and Mark Harman

Organ concert

19:00 - 19:30

Welcome reception

20:00 -

WELCOME RECEPTION

The ESEC/FSE 2011 Welcome reception will be held in the Rector's Office, the newly renovated central building of the University of Szeged.

Wednesday, Sep 7, 20:00

6726 Szeged, Dugonics tér 13.



**ORGAN CONCERT
IN THE VOTIVE CHURCH**

The Welcome reception will be preceded by a free organ concert in the Votive Church. This cathedral is one of the most distinctive buildings in the cityscape. The most monumental work of 20th-century Hungarian Ecclesiastic architecture, it is the fourth largest church in the country.

Wednesday, Sep 7, 19:00

6726 Szeged, Dóm tér



THURSDAY, SEPTEMBER 8

ELI-ALPS - The Ultrafast Challenges in Hungary

9:00 - 9:45

Keynote address by Gábor Szabó

Congress hall

Ten Years of Interface Automata

9:45 - 10:30

ACM SIGSOFT Impact Paper Award talk by Thomas A. Henzinger

Congress hall

Coffee break

10:30 - 11:00

Foyer

Research track 7 - Testing

11:00 - 12:30

Session chair: Mauro Pezze

Congress hall

Testing Software In Age Of Data Privacy: A Balancing Act

Kunal Taneja, Mark Grechanik, Rayid Ghani and Tao Xie

Strong Higher Order Mutation-Based Test Data Generation

Mark Harman, Yue Jia and William Langdon

Improved Multithreaded Unit Testing

Vilas Jagannath, Milos Gligoric, Dongyun Jin, Qingzhou Luo, Grigore Rosu and Darko Marinov

New Ideas track 1

11:00 - 12:30

Introduction to the New Ideas Track

Lecture hall

Martin Robillard

Using Social Media to Study the Diversity of Example Usage among Professional Developers

Ohad Barzilay, Orit Hazzan, Amiram Yehudai

Social Sensing: When Users Become Monitors

Raian Ali, Carlos Solis, Mazeiar Salehie, Inah Omoronyia, Bashar Nuseibeh, Walid Maalej

Cross-library API Recommendation using Web Search Engines

Zheng Wujie, Qirun Zhang, Michael Lyu

Exploiting Software Architecture to support Requirements satisfaction Testing

Paul Clements, Maria Jose Escalona, Paola Inverardi, Ivano Malavolta, Eda Marchetti

EAGLE:Engineering softwAre in the ubiquitous Globe by Leveraging unCErtainty

Marco Autilli, Davide Di Ruscio, Paola Inverardi, Patrizio Pelliccione, Massimo Tivoli, Vittorio Cortellessa

Lunch

12:30 - 14:00

Lecture room 1-2

Tool Demonstrations 1

14:00 - 15:30

EvoSuite: Automatic Test Suite Generation for Object-Oriented Software

Congress hall

Gordon Fraser and Andrea Arcuri

SCORE: a Scalable Concolic Testing Tool for Reliable Embedded Software

Yunho Kim and Moonzoo Kim

THURSDAY, SEPTEMBER 8

SMutant: A Tool for Type-Sensitive Mutation Testing

Milos Gligoric, Sandro Badame and Ralph Johnson

jStar-eclipse: an IDE for Automated Verification of Java Programs

Daiva Naudziuniene, Matko Botincan, Dino Distefano, Mike Dodds, Radu Grigore and Matthew J. Parkinson

Static Deep Error Checking in Large System Applications Using Parfait

Cristina Cifuentes, Nathan Keynes, Lian Li, Nathan Hawes, Manuel Valdiviezo, Andrew Browne, Jacob Zimmermann, Andrew Craik, Douglas Teoh and Christian Hoermann

Querypoint: Moving Backwards on Wrong Values in the Buggy Execution

Salman Mirghasemi, John Barton and Claude Petitpierre

Sydit: Creating and Applying a General Program Transformation from an Example

Na Meng, Miryung Kim and Kathryn Mckinley

New Ideas track 2

14:00 - 15:30

Stateful Breakpoints : A Practical Approach to Defining Parameterized Runtime Monitors

Lecture hall

Eric Bodden

Finding Bugs by Isolating Unit Tests

Kivanc Muslu, Bilge Soran, Jochen Wuttke

Inferring Test Results for Dynamic Software Product Lines

Bruno Cafeo, Joost Noppen, Fabiano Ferrari, Ruzanna Chitchyan, Awais Rashid

Testing MapReduce-Style Programs

Christoph Csallner, Leonidas Fegaras and Chengkai Li

Join Point Interfaces for Modular Reasoning in Aspect-Oriented Programs

Milton Inostroza, Éric Tanter, Eric Bodden

Probabilistic dataflow analysis using path profiles on structure graphs

Arun R, Subhajit Roy, Srikant Y. N.

Coffee break

15:30 - 16:00

Foyer

Tool Demonstrations 2

16:00 - 17:30

Crystal: Precise and Unobtrusive Conflict Warnings

Congress hall

Yuriy Brun, Reid Holmes, Michael D. Ernst and David Notkin

Synoptic: Studying Logged Behavior with Inferred Models

Ivan Beschastnikh, Jenny Abrahamson, Yuriy Brun and Michael D. Ernst

Cross-Layer Modeler - A Tool for Flexible Multilevel Modeling with Consistency Checking

Andreas Demuth, Roberto E. Lopez-Herrejon and Alexander Egyed

Tool Support for UML-based Specification and Verification of Role-Based Access Control Properties

Lionel Montrieux, Michel Wermelinger and Yijun Yu

SafeSlice: A Model Slicing and Design Safety Inspection Tool for SysML

Davide Falessi, Shiva Nejati, Mehrdad Sabetzadeh, Lionel Briand and Antonio Messina

THURSDAY, SEPTEMBER 8

Design and Validation of Feature-based Process Model Tailoring - A Sample Implementation of PDE

Daniela Costache, Georg Kalus and Marco Kuhmann

PSPWizard: Machine-assisted Definition of Temporal Logical Properties with Specification Patterns

Markus Lumpe, Indika Meedeniya and Lars Grunske

Research track 8 - Configurations

16:00 - 17:30

Session chair: *Wilhelm Schäfer*

Lecture hall


Taming Uncertainty in Self-Adaptive Software

Naeem Esfahani, Ehsan Kouroshfar and Sam Malek

Version-consistent Dynamic Reconfiguration of Component-based Distributed Systems

Xiaoxing Ma, Luciano Baresi, Carlo Ghezzi, Valerio Panzica La Manna and Jian Lu

On Software Component Co-Installability

 *Jérôme Vouillon and Roberto Di Cosmo*

Gala diner

20:00 -

GALA DINNER

The ESEC/FSE 2011 Gala dinner will be hosted by the University of Szeged Congress Centre.

Thursday, Sep 8, 20:00

6722 Szeged, Ady tér 10.



FRIDAY, SEPTEMBER 9

FRIDAY, SEPTEMBER 9

Software Architecture: Reflections on an Evolving Discipline	9:00 - 10:00
<i>ACM SIGSOFT Outstanding Research Award talk by Mary Shaw, David Garlan</i>	Congress hall
Artifact evaluation presentations	10:00 - 10:30
	Congress hall
Coffee break	10:30 - 11:00
	Foyer
Research track 9 - Analysis II	11:00 - 12:30
<i>Session chair: Tevfik Bultan</i>	Congress hal
Leveraging Existing Instrumentation to Automatically Infer Invariant-Constrained Models	
 <i>Ivan Beschastnikh, Yuriy Brun, Sigurd Schneider, Michael Sloan and Michael D. Ernst</i>	
Path Exploration based on Symbolic Output	
 <i>Dawei Qi, Hoang D.T. Nguyen and Abhik Roychoudhury</i>	
Synthesizing Data-structure Manipulations from Storyboards	
<i>Rishabh Singh and Armando Solar-Lezama</i>	
Research track 10 - Defects	11:00 - 12:30
<i>Session chair: TBA</i>	Lecture hall
High-Impact Defects: A Study of Breakage and Surprise Defects	
 <i>Emad Shihab, Audris Mockus, Yasutaka Kamei, Bram Adams and Ahmed E. Hassan</i>	
Micro Interaction Metrics for Defect Prediction	
<i>Taek Lee, Jaechang Nam, Donggyun Han, Sunghun Kim and Hoh Peter In</i>	
BugCache for Inspections : Hit or Miss?	
<i>Foyzur Rahman, Daryl Posnett, Abram Hindle, Earl Barr and Premkumar Devanbu</i>	
Lunch	12:30 - 14:00
	Lecture room 1-2
PhD Working Groups - presentations	14:00 - 14:30
	Congress hall
Informal Tool Demonstrations, Posters, PhD Working Groups – demonstrations	14:30 - 15:30
	Exhibition area
Coffee break	15:30 - 16:00
	Foyer

Research track 11 - Analysis III	16:00 - 17:00
<i>Session chair: TBA</i>	Congress hall
Inferring Data Polymorphism in Systems Code	
<i>Brian Hackett and Alex Aiken</i>	
Boosting the Performance of Flow-sensitive Pointsto Analysis using Value Flow	
<i>Lian Li, Cristina Cifuentes and Nathan Keynes</i>	
Research track 12 - Mining	16:00 - 17:00
<i>Session chair: TBA</i>	Lecture hall
On the Congruence of Modularity and Code Coupling	
<i>Fabian Beck and Stephan Diehl</i>	
Fuzzy Set and Cache-based Approach for Bug Triaging	
<i>Ahmed Tamrawi, Tung Nguyen, Jafar Al-Kofahi and Tien Nguyen</i>	
Closing session	17:00 - 17:30
	Congress hall



Welcome	9:00 - 9:15 <i>Lecture hall</i>
SBSE: Introduction and Motivation <i>Tutorial by Mark Harman</i>	9:15 - 10:00 <i>Lecture hall</i>
Coffee break	10:00 - 10:30 <i>Exhibition area</i>
Search-Based Program Analysis <i>Keynote by Andreas Zeller</i>	10:30 - 12:00 <i>Lecture hall</i>
Lunch	12:00 - 13:30 <i>Exhibition area</i>
PAPER SESSION 1: Foundations of SBSE	13:30 - 15:00 <i>Lecture hall</i>
Ten Years of Search Based Software Engineering: A Bibliometric Analysis <i>Fabricio Gomes de Freitas and Jefferson Teixeira de Souza</i>	
On Parameter Tuning in Search Based Software Engineering <i>Andrea Arcuri and Gordon Fraser</i>	
Elementary Landscape Decomposition of the Test Suite Minimization Problem <i>Francisco Chicano, Javier Ferrer and Enrique Alba</i>	
Coffee break	15:00 - 15:30 <i>Exhibition area</i>
Discussion Panel	15:30 - 17:00 <i>Lecture hall</i>

Exploiting Decomposability Using Recombination in Genetic Algorithms: An Exploratory Discussion <i>Keynote by Darrell Whitley</i>	9:00 - 10:30 <i>Lecture hall</i>
Coffee break	10:30 - 11:00 <i>Exhibition area</i>
PAPER SESSION 2: Graduate Track	11:00 - 12:30 <i>Lecture hall</i>
A Fuzzy Approach to Requirements Prioritization <i>Dayvison Lima, Fabricio Freitas, Gutavo Campos and Jefferson Souza</i>	
Multi-level Automated Refactoring Using Design Exploration <i>Iman Hemati Moghadam</i>	
Complexity Metrics for Hierarchical State Machines <i>Mathew Hall</i>	
Lunch	12:00 - 13:30 <i>Exhibition area</i>
PAPER SESSION 3: Concurrency and Models	13:30 - 15:00 <i>Lecture hall</i>
Comparing Metaheuristic Algorithms for Error Detection in Java Programs <i>Francisco Chicano, Marco Ferreira and Enrique Alba</i>	
Applications of Model Reuse when using Estimation of Distribution Algorithms to Test Concurrent Software <i>Jan Staunton and John A. Clark</i>	
Identifying Desirable Game Character Behaviours through the Application of Evolutionary Algorithms to Model-Driven Engineering Metamodels <i>James R. Williams, Simon Poulding, Louis M. Rose, Richard F. Paige and Fiona A. C. Polack</i>	
Coffee break	15:00 - 15:30 <i>Exhibition area</i>

SUNDAY, SEPTEMBER 11

PAPER SESSION 4: Requirements and Planning

15:30 - 17:00

Lecture hall

Cooperative Co-evolutionary Optimization of Software Project Staff Assignments and Job Scheduling*Jian Ren, Mark Harman and Massimiliano Di Penta***An Ant Colony Optimization Approach to the Software Release Planning with Dependent Requirements***Jeffeson Teixeira de Souza, Camila Loiola Brito Maia, Thiago do Nascimento Ferreira, Rafael Augusto Ferreira do Carmo and Márcia Maria Albuquerque Brasil***Optimizing the trade-off between Complexity and Conformance in Process Reduction***Alessandro Marchetto, Chiara Di Francescomarino and Paolo Tonella***SSBSE 2012, Steering Committee elections**

17:00 - 18:00

Walking Tour

18:00 - 19:00

Conference Banquet

20:00 -

MONDAY, SEPTEMBER 12

Conducting and Analyzing Empirical Studies in Search-Based Software Engineering

9:00 - 10:30

Tutorial by Lionel Briand

Lecture hall

Coffee break

10:30 - 11:00

Exhibition area

PAPER SESSION 5: Software Testing

11:00 - 12:30

A Metaheuristic Approach to Test Sequence Generation for Applications with a GUI*Sebastian Bauersfeld, Stefan Wappler and Joachim Wegener*

Lecture hall

Integration Test of Classes and Aspects with a Multi-Evolutionary and Coupling-Based Approach*Thelma Elita Colanzi, Wesley Klewerton Guez Assuao, Silvia Regina Vergilio and Aurora Pozo***Divide-by-zero Exception Raising via Branch Coverage***Neelesh Bhattacharya, Abdelilah Sakti, Giuliano Antoniol, Yann-Gael Guéhéneuc and Gilles Pesant***Lunch and Poster Session**

12:30 - 14:00

MONDAY, SEPTEMBER 12

PAPER SESSION 6: Fast Abstracts

14:00 - 15:30

Lecture hall

SBSE As Gaming*Shin Yoo***Searching the Variability Space to Fix Model Inconsistencies: A Preliminary Assessment***Roberto E. Lopez-Herrejon and Alexander Egyed***An Ant Colony Based Algorithm for Test Case Prioritization with Precedence***Camila L. B. Maia, Thiago N. Ferreira, Fabricio G. Freitas and Jeffeson T. Souza***Multi Objective Algorithms for Automated Generation of Combinatorial Test Cases with the Classification Tree Method***Peter M. Kruse and Kiran Lakhota***Empirically Identifying the Best Genetic Algorithm for Covering Array Generation***Liang Yalan, Changhai Nie, Jonathan M. Kauffman, Gregory M. Kapfhammer and Hareton Leung***Optimised Realistic Test Input Generation***Mustafa Bozkurt and Mark Harman***Coffee break**

15:30 - 16:00

Exhibition area

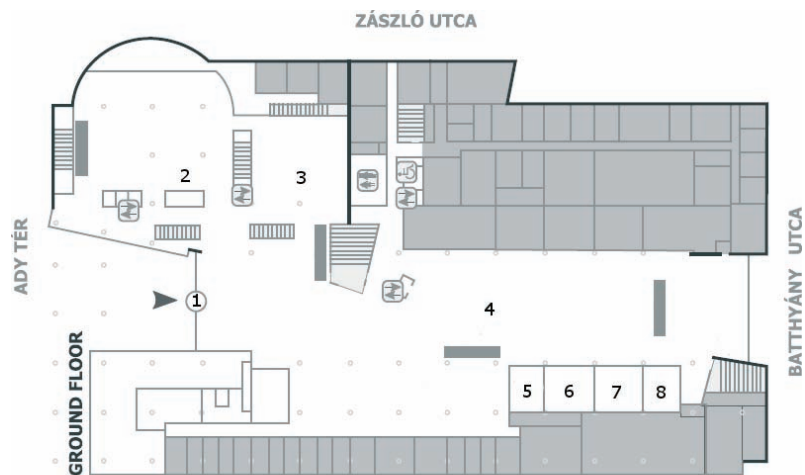
PAPER SESSION 7: Comprehension, Transformation and Scalability

16:00 - 17:30

Lecture hall

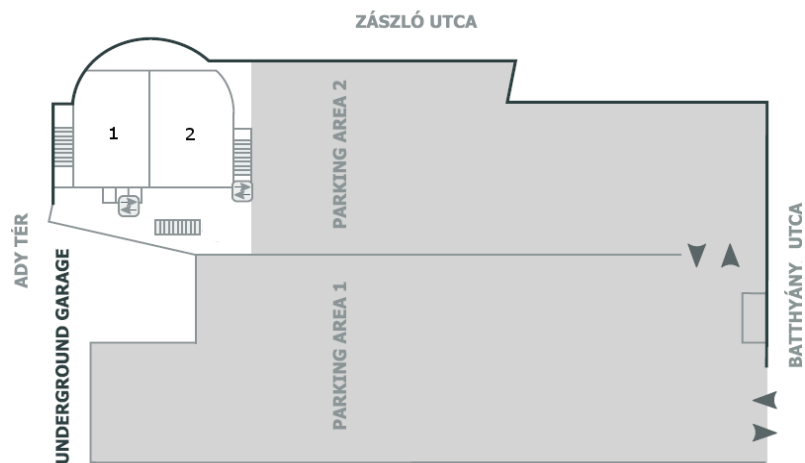
Highly Scalable Multi Objective Test Suite Minimisation Using Graphics Cards*Shin Yoo, Mark Harman and Shmuel Ur***Bytecode Testability Transformation***Yanchuan Li and Gordon Fraser***A Fast Algorithm to Locate Concepts in Execution Traces***Soumaya Medini, Philippe Galinier, Massimiliano Di Penta, Yann-Gael Guéhéneuc and Giuliano Antoniol***Close**

17:30 - 17:45



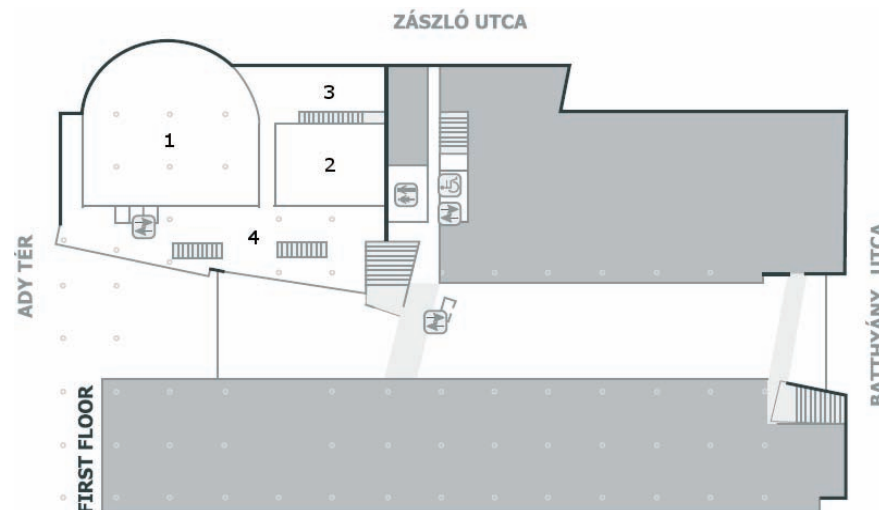
PASSAGE TO THE FACULTY OF ARTS BUILDING

- | | |
|-----------------------------------|---------------------------|
| 1 – Entrance | 5 – Seminar room 1 |
| 2 – Cloakroom (registration area) | 6 – Seminar room 2 |
| 3 – Exhibition area | 7 – Seminar room 3 |
| 4 – Atrium | 8 – Video conference room |



PASSAGE TO THE FACULTY OF ARTS BUILDING

- | | |
|--------------------|--------------------|
| 1 – Lecture room 1 | 2 – Lecture room 2 |
|--------------------|--------------------|



PASSAGE TO THE FACULTY OF ARTS BUILDING

- | | |
|-------------------|------------------------------------|
| 1 – Congress hall | 3 – Meeting room (Director's room) |
| 2 – Lecture hall | 4 – Foyer |

Registration

Registration will be open from 8:00 am to 16:00 pm during the conference.

Program changes

The online program at the ESEC/FSE website and the posters in the hallways will always be updated to reflect the latest status of the program.

Lunches

Each day lunch is served between 12:30 - 14:00 in the reception area (except SSBSE, please refer to the SSBSE program schedule.) Please do not forget to wear your conference badge at each meal.

Internet access

Free WiFi is available at the Congress Centre for conference attendees. All attendees receive personal login information in their conference bags.

Proceedings

Each conference bag contains an USB stick with the proceedings (no printed version provided). Additionally, the proceedings can be downloaded from the conference website from within the network of the Congress Centre.

Ópusztaszer, the Heritage Theme Park

Enjoy a journey into the Hungarian past, brought to life in a 136-acre theme park in Ópusztaszer. Visitors can experience life in a 19th century village, learn trades of the past, and meet old breeds of livestock and domestic animals. The main attraction of the park is the 15m high and 120m long Feszty-panorama, a monumental circular painting presenting the Hungarian Invasion of 895.

Program:

- nomadic horse parade
- Feszty-panorama
- guided tour in the heritage village
- traditional Hungarian cuisine - dinner at the Szeri Roadhouse

Date & time: Tuesday, September 6, 13.00 - 20:00

Price: 40 euros per person (to be paid in advance by bank transfer or credit card on-site)

Book your ticket at congress@congresstravel.hu

Please note that this program will only be held if a minimum number of participants apply

Computer Science Museum of Szeged

The museum at its present state should be rather referred to as a unique collection of "artefacts" from the world of computer science about the history of informatics. The collection is now displayed in one of the old barrack rooms of a former Soviet army camp until the construction of the new museum building is finished.

Date & time: Friday, September 9, 18:00 – 20:00

Price: free entry

For more information, please visit the registration desk or send an email to congress@congresstravel.hu.

Please note that the tour is organized with max. 45 participants. Snacks and refreshments will be provided.

Walking tour downtown

Date & time: Tuesday, September 6, 17:30 - 19

Price: 5 euros per person

For more information, please visit the registration desk on-site.

Please note that this program will only be organised if a minimum number of participants apply.



Szeged, as the most important city on the South Great Plain, is the economic, scientific and cultural centre of the region. Szeged offers a unique experience to any of its visitors. Its sights, like the Votive Church, the Synagogue, the Hero's Arch, the Ferenc Móra Museum all give such a distinct character to the city, that it is safe to say: Szeged is the gem of the Great Plains.

After the disastrous flood (in 1879) Szeged was reborn the most modern town in Hungary with its broad avenues and boulevards, its renovated, grandiose centre (winner of the "Europa Nostra" award) and eclectic-Secessionist mansions, all of which will enchant its visitors.

To give you more information about the sights of Szeged, a detailed booklet is placed in your conference bag

Public transportation

Please note that the local public transportation lines are currently under reconstruction. The diversion of the major lines might cause some inconveniences. We will try to give you up to date information about the actual state of public transport during the conference, but we warmly recommend walking or taking a taxi in the city.

Szeged is an easily walkable city, however buses, trolley buses, and trams are all available means of transportation. Bus tickets can be purchased almost anywhere in town, in kiosks, in shops, and even on busses. All tickets have to be validated on the vehicle. One ticket is valid for one journey only (single way on the same bus). Upon changing vehicle, another ticket needs to be validated.

Public Transport Travel fares

- | | |
|--|-----------|
| • pre-purchased | HUF 280 |
| • purchased on the vehicle | HUF 350 |
| • Discount coupon book containing 10 single tickets (when travelling the ticket needs to be validated) | HUF 2,650 |
| • One-day travelcard | HUF 860 |
| • Three-day travel card (valid within the three-day period given when purchased) | HUF 2,150 |

Parking

The interval of paying for parking is from 8 am to 5 pm on weekdays. Validation of the parking ticket has to take place immediately after parking your car at the designated area. Instructions about the validation process can be found on the parking ticket. The parking zones are distinguished by colours (green, yellow, blue).

Parking fees

- | | |
|--|----------|
| The price of a full ticket is | HUF 400 |
| The price of a half ticket is | HUF 230 |
| The price of a one-day parking ticket is | HUF 1415 |

Length of validity in case of a full parking ticket


- I. area (green zone): an hour
- II. area (yellow zone): 2 hours
- III. area (blue zone): 4 hours

Length of validity in case of a half parking ticket is half of the full one in each zone.

Restaurants


John Bull Pub

 Address: 6720 Szeged, Oroszlán u. 6.

 Opening hours: 11am – 01am

 Category: 1.cat.


Régi Híd Vendéglő

 Address: 6720 Szeged, Oskola u. 4.

 Opening hours: 11:30am – 23pm

 Category: 1.cat.


Alabárdos Étterem

 Address: 6720 Szeged, Oskola u. 13.

 Opening hours: 11:30am – 24pm

 Category: 1.cat.


Roosevelt téri halászcserda

 Address: 6720 Szeged, Roosevelt tér 14.

 Opening hours: 11am – 23pm

Clubs


Gin –Tonic Pub & Dance Hall


 Address: 6720 Szeged, Wesselényi u. 6.

 Opening hours: 11am – 23pm

 Category: 2.cat.


Átrium Music Café


 Address: 6720 Szeged, Kárász u. 9

 Opening hours: 8am – 24pm

 Category: 2.cat.

JATE Klub (official club of University of Szeged)

 Address: 6720 Szeged, Toldy u. 2..

 Opening hours: 10pm – 4am

 Category: 1.cat.

Tourist information

<http://tip.szegedvaros.hu/start.php>

6720 Szeged, Dugonics tér 2.

Tel.: 62/488-699, 488-690

Fax:62/488-690

e-mail:szeged@tourinform.hu

We recommend Radio Taxi +36 62 480 480. Please indicate that you are a participant of ESEC/FSE. You will be served by a reliable English speaking driver.

In case of emergency or need of ambulance or police, dial 112.



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