8th
joint meeting

F
September 5-9

ESEC2011

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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-	Registration	Registration	Registration	Registration	Registration
AM	9:00-10:30	DS	TB	Opening session / Keynote — R1, R2	Keynote / Impact paper — R7, NI1	Outstanding award / Artifact papers — R9, R10
	11:00-12:30	DS	TB	Keynote — R3, R4, I1	TD1, NI2	PWG presentation / Tools,Posters,PWG — R9
PM	2:00-3:30	DS	TB	R5, R6, I2	R8, TD2	R11, R12
	4:00-5:30	DS	TB	R5, I3		Closing session
PM+	5:30-6:00	PWG	PWG	Welcome reception	Gala dinner	
Evening						

Legend:

DS – Doctoral Symposium TB – Technical Briefings NIx – New Ideas track PWG – PhD Working Groups
Rx – Research track   TDx – Tool Demonstrations
Ix – Industrial track

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.

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 veriety 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

Workshop Chairs
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 Beszédes
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
Polictecnico di Milano, Italy

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Local Organization Chairs
Árpád Beszédes
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 Frittman
University of Szeged, Hungary

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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, electronical 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, electronical 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 aquisition 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."

10-12 Sep Sat - Mon		SSBSE		
7-9 Sep		Main conf.		
6 Sep Tuesday	Registration	TB	TB	PWG
		TB	TB	PWG
		Web-QUeST	Web-QUeST	
		IWPSE-EVOL	IWPSE-EVOL	
5 Sep Monday		DS	DS	PWG
		SSE	SSE	
		PASTE	PASTE	
		IWPSE-EVOL	IWPSE-EVOL	
4 Sep Sunday		ASAS	ASAS	
		WoSQ	WoSQ	
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		PM		PM+

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

Welcome	9:00 - 9:30
	Seminar room 2

The Impact of ICT Evolution and Application Explosion on Software Quality	9:30 - 10:30
Keynote address by Motoei Azuma, Session Chair: Stefan Wagner	Seminar room 2

Coffee break	10:30 - 11:00
	Atrium

Quality Models and Process Improvement	11:00 - 12:30
Session Chair: Stefan Wagner	Seminar room 2

A Unifying Model for Software Quality

K. Lochmann, A. Goeb

Do Software Process Improvements Lead to ISO 9126 Architectural Quality Factor Improvement?

M. Lavallee, P. Robillard

A Software Quality Model for SOA

K. Lochmann, A. Goeb

Lunch	12:30 - 14:00
	Exhibition area

Quality and Metrics	14:00 - 15:30
Session Chair: Klaus Lochmann	Seminar room 2

An Explanatory Analysis on Eclipse Beta-Release Bugs Through In-Process Metrics

A. Tosun Misirli, B. Murphy, T. Zimmermann, A. Bener

Introduction of Japan's Investigation Activities on Systems and Software Product Quality Metrics

M. Yamamuro, Y. Tanitsu, T. Komiyama, M. Azuma

The Use of Application Scanners in Software Product Quality Assessment

Stefan Wagner

Coffee break	15:30 - 16:00
	Atrium

Data Quality and Discussion	16:00 - 17:30
Session Chair: Stefan Wagner	Seminar room 2

A Process for Assessing Data Quality Group or plenary discussion

H. Sneed, R. Majnar

Closing

Welcome	9:00 - 9:30
	Seminar room 3

RV: A Runtime Verification Framework for Monitoring, Prediction and Mining	9:30 - 10:30
Keynote Address by Grigore Rosu	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

Radu Calinescu

Model checking Requirements at run-time in Adaptive systems

Marco Mori and Paola Inverardi

Robust-and-evolvable Resilient Software Systems -- Open Problems and Lessons Learned

Vincenzo De Florio

Lunch	12:30 - 14:00
	Exhibiton area

Failure Analysis	14:00 - 15:30
Towards Accurate Failure Prediction for the Proactive Adaptation of Service-oriented Systems	Seminar room 3

Andreas Metzger

Using Feature Locality: Can We Leverage History to Avoid Failures During Reconfiguration?

Brady Garvin, Myra Cohen, and Matthew Dwyer

Component -based Timed Hazard Analysis of Self-healing Systems

Claudia Priesterjahn, Dominik Steenken, and Matthias Tichy

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

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
Anne Meade and J.J. Collins	
Run-time Phenomena in Dynamic Software Updating: Causes and Effects	
Allan Gregersen and Bo Jørgensen	

Coffee break	10:30 - 11:00
	Atrium / Exhibiton area

Session 2:Requirements, traceability, and dependencies	11:00 - 12:30
	Seminar room 2
Requirements evolution drives software evolution	
Neil A. Ernst and John Mylopoulos	
Towards a Benchmark for Traceability	
Eya Ben Charrada, David Caspar, Cédric Jeanneret and Martin Glinz	
Logical Dependencies Origins: A Case Study	
Gustavo Ansaldi Oliva, Francisco Santana, Marco Gerosa and Cleidson De Souza	

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	
Steffen Lehnert	
Using the Gini Coefficient for Bug Prediction in Eclipse	
Emanuel Giger; Martin Pinzger and Harald Gall	
Are the classes that use exceptions defect prone?	
Cristina Marinescu	

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

Welcome	9:00 - 10:30
Keynote Address by *Prem Devanbu*	Seminar room 2

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
Mathieu Lavallee and Pierre Robillard	
Network Analysis of OSS evolution: An Empirical Study on ArgoUML Project	
Wen Zhang	
User generated (web) content: trash or treasure	
Giovanni Alluvatti, Andrea Capiluppi, Giuseppe De Ruvo and Marco Molfetta	

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
Tom Arbuckle	

Session 5: Tool demonstrations	14:30 - 15:30
Historage: Fine-grained Version Control System for Java	
Hideaki Hata, Osamu Mizuno and Tohru Kikuno	
An Editing-operation Replayer with Highlights Supporting Investigation of Program Modifications	
Takayuki Omori and Katsuhisa Maruyama	

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
Matthias Riebisch, Stephan Bode and Robert Brcina	
Challenges in Model-Based Evolution and Merging of Access Control policies	
Lionel Montrieux, Michel Wermelinger and Yijun Yu	
An agent-based framework for distributed collaborative model evolution	
Hoa Khanh Dam and Aditya Ghose	

Closing	17:30 - 18:00

PASTE

10th ACM SIGPLAN-SIGSOFT Workshop on Program Analysis for Software Tools and Engineering

Monday, September 5

Program Synthesis for Automating End-user Programming and Education	*9:00 - 10:30*
Keynote Address by Sumit Gulwani	*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

Emily R. Jacobson, Nathan Rosenblum, Barton P. Miller

Anywhere, Any-Time Binary Instrumentation

Andrew R. Bernat, Barton P. Miller

Toward Systematic, Comprehensive Trace Generation for Behavioral Pattern Detection through Symbolic Execution

Markus von Detten

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

Marc Fisher II, Jan Wloka, Frank Tip, Barbara G. Ryder and Alexander Luchansky

Locating Failure-Inducing Environment Changes

Dawei Qi, Minh Ngoc Ngo, Tao Sun, Abhik Roychoudhury

Assessing Modularity via Usage Changes

Yana Momchilova Mileva, Andreas Zeller

Coffee break	*15:30 - 16:00*
	Atrium / Exhibition area
Flexible time	*16:00 - 17:30*
5-minute madness, demos, discussion, etc	*Seminar room 1*

SSE– 4th International Workshop on Social Software Engineering

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*
Keynote address by Christoph Treude	
Social Requirements Engineering	*9:45 - 10:30*
Online Social Networks as a Catalyst for Software and IT Innovation	*Seminar room 3*
Leif Singer, Norbert Seyff and Samuel A. Fricker	
Towards Systematic Analysis of Continuous User Input	
Dennis Pagano	
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*
Antony Tang, Ton Gerrits, Peter Nacken and Hans Van Vliet	
The Learning Component in Social Software Engineering	
Pierre Robillard	
Extending Socio-technical Congruence with Awareness Relationships	
Irwin Kwan and Daniela Damian	
Lunch	*12:30 - 14:00*
	Exhibition area
Collaboration, Communication, and Awareness	*14:00 - 15:30*
Engineering Software Engineering Teams	*Seminar room 3*
Patrick Wagstrom	
Socially Mediated Technology Awareness	
Thomas Fritz and Gail Murphy	
Augmenting Social Awareness in a Collaborative Development Environment	
Fabio Calefato, Filippo Lanubile, Nicola Sanitate and Giuseppe Santoro	
Secret Ninja Testing with HALO Software Engineering	
Jonathan Bell, Swapneel Sheth and Gail Kaiser	
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	9:00 - 9:30
Invited talk by Prem Devanbu	Lecture room 1
DS1 - Development documentation	9:30 - 10:30
Mining Development Repositories To Study the Impact of Collaboration on Software Systems	Lecture room 1
Nicolas Bettenburg	
Reputation-based Self-management of Software Process Artifact Quality in Consortium Research Projects	
Christian Prause	
An architecture-centric approach for goal-driven requirements elicitation	
Zoya Durdik	
Coffee break	10:30 - 11:00
	Atrium / Exhibition area
DS2 - Specification mining	11:00 - 11:40
Experimental Specification Mining for Enterprise Applications	Lecture room 1
Matthias Schur	
Search Based Hierarchy Generation for Reverse Engineered State Machines	
Mathew Hall	
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	14:00 - 14:30
Invited talk by Laurie Williams	Lecture room 1
DS3 - Testing	14:30 - 15:30
Automatic Test Suite Evolution	Lecture room 1
Mehdi Mirzaaghaei	
Automatic Structural Testing with Abstraction Refinement and Coarsening	
Mauro Baluda	
Understanding Failures Through Facts	
Jeremias Rößler	
Coffee break	15:30 - 16:00
	Atrium / Exhibition area
DS4 - Adaptation	16:00 - 16:40
QoS Verification and Model Tuning @ Runtime	Lecture room 1
Antonio Filieri	
A Software Lifecycle Process for Context-aware Adaptive Systems	
Marco Mori	
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
Social event	Evening
	Tuesday, September 6
Individual work meetings of the groups	17:30 - 18:30
	Lecture room 1-2
Social event	Evening
	Wednesday, September 7
Individual work activities	9:00 - 17:30
	Exhibition area
Social event	Evening
	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

Technical Briefings Track

Tuesday, September 6

Technical Briefings 1	9:00 - 10:30
Management of Unstructured Information during Software Evolution: Applications of Text Retrieval	Lecture room 1
Andrian Marcus	
Technical Briefings 2	9:00 - 10:30
Multicore Software engineering	Lecture room 2
Victor Pankratius	
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
Lin Tan, Tao Xie	
Technical Briefings 4	11:00 - 12:30
Model-based Emergent Middleware to Meet the Challenges of Interoperability in Pervasive Networks	Lecture room 2
Valérie Issarny	
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
Daniel German, Massimiliano Di Penta	
Technical Briefings 6	14:00 - 15:30
Self-healing software systems	Lecture room 2
Mauro Pezze	
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
Sarunas Marciuska, Salvatore Alessandro Sarcia, Alberto Sillitti, Giancarlo Succi	
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
Mark Harman	

WebQUeST – Web Quality, Security and Testing

Tuesday, September 6

Session 1 - Mozilla	9:00 - 10:30
	Seminar room 3
Introduction and Welcome	
Organizers	
Security challenges for the web platform	
David Herman	
Vetting Browser Extensions for Security Vulnerabilities with VEX	
Sruthi Bandhakavi (Presented by Julian Dolby)	
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
	Seminar room 3
Providing Tool Support for JavaScript Programmers -	
Anders Moeller	
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
	Seminar room 3
Detecting and Analyzing Web-based Malware via Statistical Learning Techniques -	
Marco Cova	
Finding Malware on a Web Scale	
Benjamin Livshits:	
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
	Seminar room 3
Information-flow Security: Moving Beyond Graph Reachability	
Omer Tripp	
Using Taint Analysis to Detect Vulnerabilities in Web Sites	
Salvatore Guarneri	
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
	Lecture room 1

Development and Operations - Two Worlds Collide (Keynote)

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 Lublinerman and Sara Navidpour

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 Sidiroglou, Sasa Misailovic, Hank Hoffman and Martin Rinard

Industrial track 2 - Software Systems and Services	14:00 - 15:30
	Lecture room 1

Productivity in IT services (Keynote)

Satish Chandra

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

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

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 Autili, 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

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
	Lecture hall

Stateful Breakpoints : A Practical Approach to Defining Parameterized Runtime Monitors

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
	Congress hall

Crystal: Precise and Unobtrusive Conflict Warnings

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

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

Daniela Costache, Georg Kalus and Marco Kuhrmann

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

Software Architecture: Reflections on an Evolving Discipline	*9:00 - 10:00*
ACM SIGSOFT Outstanding Research Award talk by Mary Shaw, David Garlan	*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*
Session chair: Tevfik Bultan	*Congress hal*

Leveraging Existing Instrumentation to Automatically Infer Invariant-Constrained Models

Ivan Beschastnikh, Yuriy Brun, Sigurd Schneider, Michael Sloan and Michael D. Ernst

Path Exploration based on Symbolic Output

Dawei Qi, Hoang D.T. Nguyen and Abhik Roychoudhury

Synthesizing Data-structure Manipulations from Storyboards

Rishabh Singh and Armando Solar-Lezama

Research track 10 - Defects	*11:00 - 12:30*
Session chair: TBA	*Lecture hall*

High-Impact Defects: A Study of Breakage and Surprise Defects

Emad Shihab, Audris Mockus, Yasutaka Kamei, Bram Adams and Ahmed E. Hassan

Micro Interaction Metrics for Defect Prediction

Taek Lee, Jaechang Nam, Donggyun Han, Sunghun Kim and Hoh Peter In

BugCache for Inspections : Hit or Miss?

Foyzur Rahman, Daryl Posnett, Abram Hindle, Earl Barr and Premkumar Devanbu

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*
Session chair: TBA	*Congress hall*

Inferring Data Polymorphism in Systems Code

Brian Hackett and Alex Aiken

Boosting the Performance of Flow-sensitive Pointsto Analysis using Value Flow

Lian Li, Cristina Cifuentes and Nathan Keynes

Research track 12 - Mining	*16:00 - 17:00*
Session chair: TBA	*Lecture hall*

On the Congruence of Modularity and Code Coupling

Fabian Beck and Stephan Diehl

Fuzzy Set and Cache-based Approach for Bug Triaging

Ahmed Tamrawi, Tung Nguyen, Jafar Al-Kofahi and Tien Nguyen

Closing session	*17:00 - 17:30*
	Congress hall

SATURDAY, SEPTEMBER 10

Welcome	*9:00 - 9:15*
	Lecture hall
SBSE: Introduction and Motivation	*9:15 - 10:00*
Tutorial by Mark Harman	*Lecture hall*
Coffee break	*10:00 - 10:30*
	Exhibition area
Search-Based Program Analysis	*10:30 - 12:00*
Keynote by Andreas Zeller	*Lecture hall*
Lunch	*12:00 - 13:30*
	Exhibition area
PAPER SESSION 1: Foundations of SBSE	*13:30 - 15:00*
	Lecture hall

Ten Years of Search Based Software Engineering: A Bibliometric Analysis

Fabrício Gomes de Freitas and Jerffeson Teixeira de Souza

On Parameter Tuning in Search Based Software Engineering

Andrea Arcuri and Gordon Fraser

Elementary Landscape Decomposition of the Test Suite Minimization Problem

Francisco Chicano, Javier Ferrer and Enrique Alba

Coffee break	*15:00 - 15:30*
	Exhibition area
Discussion Panel	*15:30 - 17:00*
	Lecture hall

SUNDAY, SEPTEMBER 11

Exploiting Decomposability Using Recombination in Genetic Algorithms: An Exploratory Discussion	*9:00 - 10:30*
Keynote by Darrell Whitley	*Lecture hall*
Coffee break	*10:30 - 11:00*
	Exhibition area
PAPER SESSION 2: Graduate Track	*11:00 - 12:30*
	Lecture hall

A Fuzzy Approach to Requirements Prioritization

Dayvison Lima, Fabrício Freitas, Gutavo Campos and Jerffeson Souza

Multi-level Automated Refactoring Using Design Exploration

Iman Hemati Moghadam

Complexity Metrics for Hierarchical State Machines

Mathew Hall

Lunch	*12:00 - 13:30*
	Exhibition area
PAPER SESSION 3: Concurrency and Models	*13:30 - 15:00*
	Lecture hall

Comparing Metaheuristic Algorithms for Error Detection in Java Programs

Francisco Chicano, Marco Ferreira and Enrique Alba

Applications of Model Reuse when using Estimation of Distribution Algorithms to Test Concurrent Software

Jan Staunton and John A. Clark

Identifying Desirable Game Character Behaviours through the Application of Evolutionary Algorithms to Model-Driven Engineering Metamodels

James R. Williams, Simon Poulding, Louis M. Rose, Richard F. Paige and Fiona A. C. Polack

Coffee break	*15:00 - 15:30*
	Exhibition area

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

Jerffeson 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	Lecture hall

Sebastian Bauersfeld, Stefan Wappler and Joachim Wegener

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

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 Jerffeson T. Souza

Multi Objective Algorithms for Automated Generation of Combinatorial Test Cases with the Classification Tree Method

Peter M. Kruse and Kiran Lakhotia

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

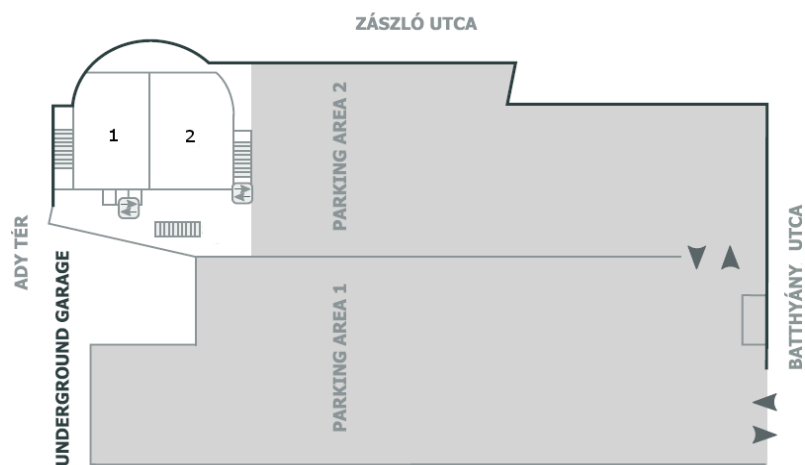| PAPER SESSION 7: Comprehension, Transformation and Scalability	16:00 - 17:30
	Lecture hall

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
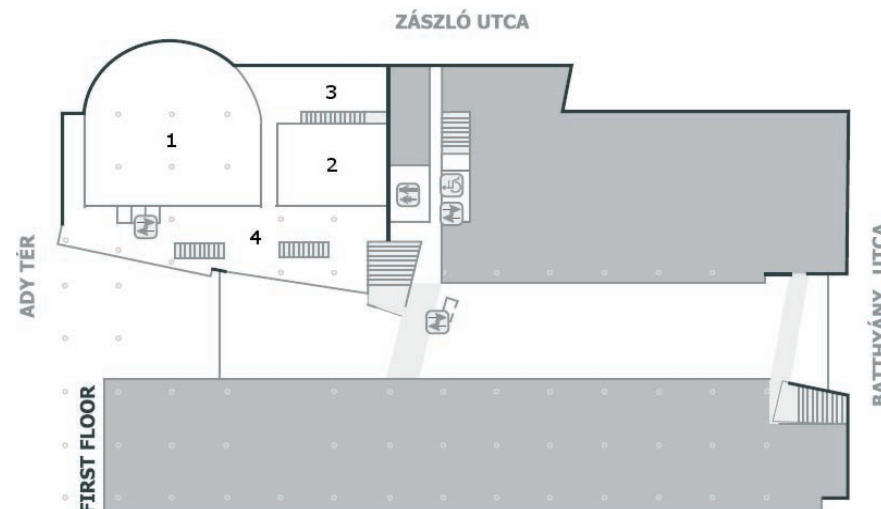
Close	17:30 - 17:45

ZÁSZLÓ UTCA

ADY TÉR

BATTHYÁNY UTCA

GROUND FLOOR
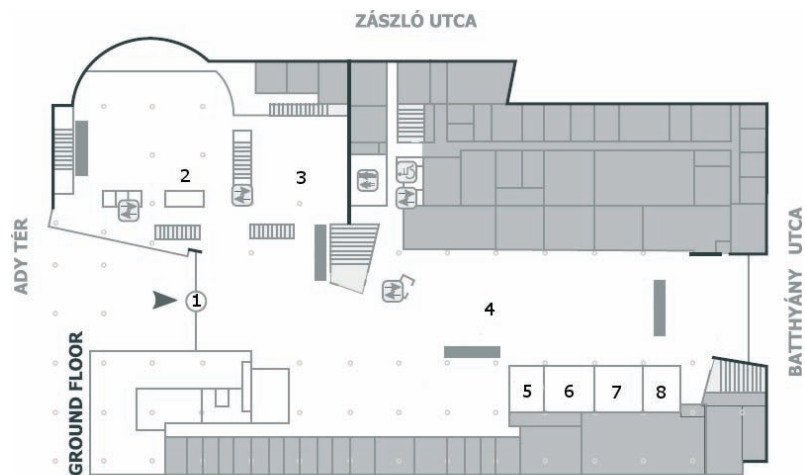
PASSAGE TO THE FACULTY OF ARTS BUILDING

1 – Entrance
2 – Cloakroom (registraion area)
3 – Exhibition area
4 – Atrium

5 – Seminar room 1
6 – Seminar room 2
7 – Seminar room 3
8 – Video conference room

ZÁSZLÓ UTCA

ADY TÉR

BATTHYÁNY UTCA

UNDERGROUND GARAGE

PARKING AREA 2

PARKING AREA 1

PASSAGE TO THE FACULTY OF ARTS BUILDING

1 – Lecture room 1

2 – Lecture room 2

ZÁSZLÓ UTCA

ADY TÉR

BATTHYÁNY UTCA

FIRST FLOOR

PASSAGE TO THE FACULTY OF ARTS BUILDING

1 – Congress hall
2 – Lecture hall

3 – Meeting room (Director's room)
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 and 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 ticketshave 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 ticked 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 halászcsárda

Address: 6720 Szeged, Roosevelt tér 14.

Opening hours: 11am – 23pm

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.

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.

Károlyi Mihály Dormitory

Map legend:
- Szeged Railway Station
- TIK - location of the conference
- Rector's Office
- Votive church
- Hotel Forrás
- Hotel Novotel
- Hotel Tisza

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