

ENASE 2011

6th International Conference on Evaluation of Novel Approaches to Software Engineering

Final Program

Beijing, China · 8 - 11 June, 2011

Hosted by:



北京交通大学
经济管理学院
School of Economics and Management
Beijing Jiaotong University

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Foreword

The mission of the ENASE (Evaluation of Novel Approaches to Software Engineering) conferences is to be a prime international forum to discuss and publish research findings and IT industry experiences with relation to evaluation of novel approaches to software engineering. By comparing novel approaches with established traditional practices and by evaluating them against software quality criteria, the ENASE conferences advance knowledge and research in software engineering, identify most hopeful trends and propose new directions for consideration by researchers and practitioners involved in large-scale software development and integration.

This volume contains the program of the 6th edition of ENASE held in Beijing, China. The previous conferences took place in Erfurt, Germany (2006), Barcelona, Spain (2007), Madeira, Portugal (2008), Milan, Italy (2009), and Athens, Greece (2010). There is a growing research community around ENASE that is increasingly recognized as an important international conference for researchers and practitioners to review and evaluate emerging as well as established SE methods, practices, architectures, technologies and tools. The ENASE conferences host also keynotes, workshops and panels. The ENASE proceedings are published in time for conferences by INSTICC (Institute for Systems and Technologies of Information, Control and Communication). Moreover, starting from the 2nd conference in Barcelona, modified and extended versions of ENASE papers are published as post-proceedings by Springer CCIS (Communications in Computer and Information Science) in Revised Selected Papers Series.

Overall, for the 6th ENASE in Beijing we have received 75 papers from 31 countries, of which 55 were regular papers and 20 were short or position papers. The reviewing process was carried out by about 80 members of the ENASE 2011 Program Committee. The final decision of acceptance/rejection was taken based on the received reviews by the PC co-chairs Leszek Maciaszek and Kang Zhang. Borderline papers were subjected to extra considerations and discussions before decisions were reached.

For ENASE 2011, we have finally accepted 18 full papers (with scores 4 and above; max. 6) and 10 short papers. The relevant acceptance statistics for full papers are: 32.7% (based on 55 submissions) or 24% (based on 75 submissions) - clearly, the former percentage is more truthful. The acceptance rate confirms the desire of the ENASE Steering Committee to ensure high quality of the conferences. All six ENASE conferences had the acceptance rate for full papers at around or below 30%.

Papers accepted for ENASE 2011 were presented in nine categories:

1. Software Quality and Testing
2. Requirements Engineering
3. Programming
4. Software Processes and Methods
5. Software Tools and Environments
6. Business Process and Services Modeling
7. Software Components
8. Software Effort and Processes
9. Socio-Technical Aspects of Software Development

Leszek Maciaszek

Macquarie University, Australia / University of Economics, Poland

Kang Zhang

The University of Texas at Dallas, U.S.A.

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Panel

Thursday 9

09:10 – 09:30

Room: ICC-R

Keynote Lectures

Thursday 9

10:00 – 11:00

Room: ICC-R

Railway Logistics Value Extension Theory

Xuewei Li
Beijing Jiaotong University
China

According to the data from the ministry of railway, operating mileage of China high speed railway has reached more than 7000 kilometers by 2011, and the rapid development of high-speed railway promotes railway network formation and improvement. How to play the role of railway network in the logistics value extension is the core of railway transportation development in this new period; how to combine rail transportation with original production and demand network, optimize railway resource allocation, and make the railway network resource be effective, are the key of railway transportation marketing strategy in this new period. Based on the theories of logistics, supply chain, transportation, logistics planning and related theoretical forefront, treating logistics value extension theory as the center, this speech focuses on the optimization of combining production, with demand and railway transportation network, and proposes the goal for the next stage.

Li Xuewei, Vice President of Beijing Jiaotong University, is professor and Ph.D. advisor of the School of Economics and Management of BJTU.

Li Xuewei graduated from Central South University, where he studied Probability Theory and Mathematics Process, receiving his Ph.D. in Science in 1990. He earned his master's degree in engineering, in 1987, from Southwest Jiaotong University.

Li also holds key positions in several scientific and academic societies, including: Specialist of Prominent Contribution of the Ministry of Railways; Standing member of China Society of Soft-Science Research; Standing member of China Society of Quantitative Economics (CSQE); senior member of China Society of Railways; commissioner of China Society of Information and Economics.

Thursday 9

11:15 – 12:15

Room: ICC-R

Management: A Scientific Discipline for Humanity

ShouBo Xu

*Chinese Academy of Engineering / Beijing Jiaotong University
China*

This paper proposed a new concept of management: Managing According to Reason (MR). Since "manage" means to lead, plan, organize and control, and "reason" means to understand the law of the development of objects being managed, this new concept is an integration of the two elements of "managing" and "reason". MR studies the contradictory relationship between "managing" and "reason", and considers how such a relationship changes and develops. MR is an integration of the disciplines of management, philosophy, natural science, engineering technology, and social science. We believe the MR is a comprehensive scientific discipline that will greatly benefit humanity. Since "management" cannot work without power, while "reason" relies on science, MR is an integration of power and science. Power is MR's assurance, and science is MR's basis. We believe that MR will play a major role in twenty-first century.

Shoubo Xu was born in Shaoxing (a city which located at Zhengjiang province of China). He obtained a Bachelor's Degree in Power Engineering from Nanjing Institute of Technology in 1955. Then he graduated from the Energy Institute of the Academy of Science of USSR in 1960, with an Associate Doctorate Degree of Technological Science. Now he is honored as a professor, consultant and PHD supervisor of Economics and Management school at Beijing Jiao Tong University. And he also works as the Director of China Center of Technological Economics Research, the President of Comprehensive Energy Institute, Honorary Dean of the Material Flow School at Beijing Jiaotong University, and named as Chinese Director of the Sino-Austria Innovation Research Center. At the same time, Dr Xu is also regarded as the Chairman of Professors Association in the Economics and Management department. Besides that, he was the core initiator and co-founder of the Chinese Technological Economics and Comprehensive Energy Engineering, the pioneer of our nation's Comprehensive Material Flow Engineering and the science of Managing According to Reason MR.

For more than 50 years, academician Xu has made 422 achievements in theoretical and application aspects in the three new scientific fields of TE, ETE/CEE and MFTE/CMFE. More than 50 of his achievements have received awards, including the National Science Congress Award, the National Science & Technology Progress Award and various awards from the Chinese Academy of Science, Chinese Academy of Social Sciences, National Development and Reform Commission and City of Beijing, etc, he has received National Science & Technology Progress Award nine times (the first prize provincial, one time National Science & Technology Progress first prize and one time third prize, four times provincial second prize and three times third prize).

Friday 10

09:00 – 10:00

Room: ICC-R

Into the Cloud Enterprises

Yulin Zheng
UFIDA
China

Cloud Computing have gained popularity over the past few years. As a state-of-the-art IT technology, it has been changing the business model in the whole world. This speech presents the ongoing work from UFIDA Software Co., Ltd., which is a leading supplier of proprietary enterprise management/ERP software, service and solutions.

1. Interpretation of the “management software + clouding computing” model from UFIDA;
2. Upgrading its business model, to be the core strength of the development of Chinese clouding computing industry;
3. Rooting in the technology, clouding computing will promote the comprehensive e-informatization of Chinese enterprises;
4. Leading continuously in the industry, cloud strategy will guide Chinese enterprises into the world.

Yulin Zheng UFIDA, senior Vice President. Mainly responsible for marketing, business development.

Mr. Zheng graduated from the Shanghai East China Normal University, Master of Computer Application Engineering; visiting professor at Renmin University of China, Member of Academic Committee of China Computer Federation, Deputy Director of China Electronics Standardization Association of Enterprise Information Standards Committee, former General Manager of applications Software department of ChinaSoft International, CTO of CCID. He has been leader and organizer of large-scale corporate enterprise applications software development in PANSKY and Yu Bo, has a profound understanding of architecture and R & D system of management software.

Friday 10

10:00 – 11:00

Room: ICC-R

A System-of-Systems Approach to the Analysis and Control of Sustainability

Yannis A. Phillis
*Technical University of Crete
Greece*

Many complex systems influence the well-being and sustainability of a country. These systems could be natural or environmental and man-made or social. The state of biodiversity, water, air or land are examples of the former, whereas health, education, economy, and policies are examples of the latter. All of the aforementioned systems are extremely involved and hard to model.

To overcome some of the modeling difficulties the System-of-Systems (SoS) approach is adopted. This is a multilayered and hierarchical approach that exposes the various levels of the system as well as their state and control parameters. Two such systems are examined as SoS: biodiversity and health. The goal is to devise strategies that improve biodiversity and health and thus overall sustainability for a given region or country. These strategies should be developed within certain constraints such as limited budget. For example, the goal of biodiversity conservation is reduced to bringing extinctions due to human activities down to zero, given the budget allocated for this purpose. Such a problem could be formulated as an optimal control problem whenever possible, or as an adaptive SoS control problem, where strategies span all possible uncertainties to bring biodiversity within the target region.

Each system is modeled as a SoS at various levels and each level is in turn modeled according to existing knowledge. Various adaptive policies are then designed that take into account missing intermediate targets. A host of strategies are finally developed so that environmental and societal systems contribute to the sustainability of a country.

Yannis A. Phillis received his diploma in electrical and mechanical engineering from the National Technical University of Athens, Greece, in 1973 and the M.S., Engineer Degree, and Ph.D. degrees from the University of California, Los Angeles, in control systems in 1978, 1979, and 1980, respectively.

From 1980 to 1986, he was with Boston University, Boston, MA. Since 1986, he has been with the Department of Production Engineering and Management, Technical University of Crete, Chania, Greece where he is professor and director of the CAM Laboratory. In 1992 and between 2005 and 2007 he was visiting professor at UCLA's Chemical Engineering Department. Between September and October 2008, as Onassis Foundation Senior Visiting Fellow in the US, he lectured on environmental issues in four American Universities. His research interests are in stochastic control, discrete-event systems, and applications in manufacturing networks and environmental systems.

Dr. Phillis is Book Editor of the Journal of Intelligent and Robotic Systems, Advisory Board Member for the IEEE Systems Journal, Associate Editor for the International Journal of Engineering Management, Member of the Editorial Advisory Board for the Environmental Engineering and Management Journal, and was on the Editorial Board of the Encyclopedia of Life Support Systems, and past Editor of the IEEE Robotics and Automation Magazine. He has also served as Trustee of the Venizelos Research Institute and the Center of Mediterranean Architecture in Greece between 1999 and 2005.

He is the recipient of numerous honors among which Professor of the Year Award at Boston University in 1986, an award by the Academy of Athens for his environmental activities in 2007, Fellow of the Venizelos Research Institute in Greece, recipient of awards by the Municipalities of Chania and Assini, Greece in 2005 and 2008 respectively for his service to society, and recipient of a "Lifetime Achievement Award", for his contributions to production and environmental systems and leadership in higher education at the World Automation Conference 2010, Kobe, Japan.

He was general chair of the Fifth International Conference on Advances in Communication and Control (1995) and the 3d and 5th International Conference on Management of Technological Change (2003, 2005).

Dr. Phillis was rector of the Technical University of Crete for 10 years until 2005. In 1994 founded and developed the 80-acre Park for the Preservation of Flora and Fauna in Crete. The Park has a laboratory for the study and preservation of endangered plant species, which is also actively involved in ethnobotanical issues. The Park is visited by thousands of people every year.

He has published over 100 scientific papers and four technical books. He is an award winning writer in Greece and the US, having published five poetry collections, three novels, and two environmental books. He is a Fellow of AAAS; a Senior Member of IEEE; and Member of Sigma Xi; Poets and Writers, USA; P.E.N. Club; and the European Art Center, Athens.

Friday 10

11:15 – 12:15

Room: ICC-R

On Complexity of Event-Driven Service Systems

Leszek A. Maciaszek
Macquarie University / University of Economics
Australia / Poland

Complexity is defined as the degree to which a software system is difficult to understand, maintain and evolve. The main difficulty stems from complex interaction patterns between system components/services. A growing importance of event-driven processing in service systems generates new research questions related to architectural styles that can best harness complexity when traditional service invocations/compositions are intermixed with event-driven publish-subscribe processing. This keynote addresses relevant complexity issues and offers a method to monitor and minimize software dependencies from architectural models.

Leszek A. Maciaszek is an academic, researcher, industry consultant and author. He resides in Australia and in Poland. In Australia, he was a Senior Lecturer at the University of Wollongong (1985-1991), an Associate Professor of Computing at Macquarie University - Sydney (1991-2010), and the Managing Director of a software consultancy firm MACOMP Software (1994-2004). Since 2009, he is a Professor at Wroclaw University of Economics in Poland, where he holds the positions of Director of Institute of Business Informatics and Head of Department of MIS Engineering. He has initiated a number of international conferences, including ENASE (Evaluation of Novel Approaches to Software Engineering). He has authored over 140 publications related to software engineering and architecture, systems analysis and design, databases, object technology, business modeling, and service-oriented computing. His more recent Addison-Wesley books "Requirements Analysis and System Design" and "Practical Software Engineering" were translated to Chinese, Russian and Italian.

Saturday 11
09:00 – 10:00
Room: ICC-R

Information Makes Spaces for Working and Living Intelligent: A Semiotic Perspective

Kecheng Liu
University of Reading
U.K.

We now live in the information era. Information is the key resource and information technology is the key enabler in such an era. The keynote examines the features and challenges in this era. The lecture presents an insight of the strategic function of information in relation to our working and living from a semiotic perspective. Examples of the impact of information in typical sectors have been used as evidence to demonstrate how information delivered through IT makes our society intelligent and improves the quality of life in all aspects. Finally it introduces a philosophic approach for understanding the emergent issues and dealing with the challenges in the information era.

Kecheng Liu, Fellow of British Computer Society, is a full professor and holds a chair of Informatics and E-Business at University of Reading, UK. He is the Director of Informatics Research Centre, and Head of School of Business Informatics, Systems and Accounting, Henley Business School. He has published over 180 papers in conferences and journals. His research interests span from organisational semiotics, requirements studies, enterprise information systems management and engineering, business processing modelling, alignment of business and IT strategies, co-design of business and IT systems, pervasive informatics and intelligent spaces for working and living. He serves in several journal editorial boards, and guest edited special issues. His research monograph on Semiotics in Information Systems Engineering (2000 Cambridge University Press), is one of the first treating the topic in a systematic manner and has been widely cited.

He was visiting Professor at Southeast University, Fudan University, Beijing Jiaotong University, Dalian University of Technology, Shanghai University of Finance and Economics, Beijing Institute of Technology and the Graduate School of Chinese Academy of Science (all in China), Santiago University of Chile, and officially appointed PhD supervisor in Beijing Institute of Technology. He is member of Senior Board of IBG (British Intelligent Buildings Group) and senior advisor on digital hospitals in a governmental healthcare organisation in China.

Saturday 11
10:00 – 11:00
Room: ICC-R

Increasing Your Rate of Return with Closed Loop Supply Chains

Harold Krikke
Tilburg University
The Netherlands

The field of closed-loop supply chains is gaining momentum, but still mostly focuses on cost minimization of reverse logistics processes. That is remarkable as value creation is key in mainstream supply chain management.

Sustainability goals (reduction of resource consumption, pollution, greenhouse gasses etc.) are most effectively addressed when considered a business opportunity (Krikke & van der Laan, 2010). Justifiably, closed-loop supply chain (CLSC) management is defined by Guide and Van Wassenhove (2006), as "the design, control and operations (of a system) to maximize value creation over the entire life cycle of a product with dynamic recovery of value from different types of returns over time".

Customer value creation occurs through the offering of new and/or better services with improved proximity to the customer. Environmental value creation occurs through the reduction of environmental impact compliance. Sourcing value comes via cheaper sourcing through reuse and recycling.

This presentation explores how companies slowly change their approach from cost minimization to value creation. A number of real life case examples are given. Finally some results from a global survey are presented, suggesting how third party service providers can add value to the closed loop supply chain by current and newly developed services.

Harold Krikke is a member of the Department of Organization and Strategy at the Tilburg University since 2004. He first studied Industrial Engineering and Management at Twente University of Technology in Enschede. At the same university he completed his Ph.D. in 1998 in the field of reverse logistics. Since then, he works as an assistant professor at Erasmus University Rotterdam and also as a business consultant at Tebodin consultants. As of 2002 he is a senior researcher and project manager of CentER Applied Research and later became Associate Professor at the faculty Economics and B.A. of Tilburg University. He is the Chaired Professor of Closed loop supply chain at the Open University Netherlands as of 2008 and also an advisory professor of Beijing Jiaotong University as of 2009. His research interests include reverse logistics, the integration of return flows in supply chains, the relationship with product life cycle management and the possible gains in supply chains through corporate planning.

Social Event and Banquet

Venue – Dinner at the Jiayuan Hotel
Friday 10, 18:30 – 23:00

Chinese folk music has a very long history. In the Neolithic Age in thousand seven hundred years to seven thousand years ago, the ancestors may have to burn Pottery Xun, digging system bone whistle. The folk music of the Han ethnic group of China has been particularly prominent throughout the history of the country. As it is the Han ethnic group is the largest of all hence their folk music became extremely popular with time.

When discussing Han Chinese music, it is common to distinguish two major styles: northern and southern. The styles correspond to the two major geographical and cultural areas where most Han people live. Although both styles emanate from the general Han Chinese culture, they differ in detail because of environmental conditions. The north is cold, dry, and windy. The south, on the other hand, has mild weather and much rain.



Beijing Jiaotong University owns an art troupe with more than 500 students, which divided into six sub-clubs, namely glee club, symphony orchestra, concert band, dance troupe, drama club, folk music group. Since established in June 1991, it gained great achievements in many Beijing and national university competitions and external communication performances, trained a large number of college literary and artistic students. The “Long March Suite” was invited to perform in the Great Hall of the People and Guo An theater, which aroused strong repercussion in the society.

The student art troupe and glee club gained two first prizes in the national university student art exhibition competition. In the meantime of obtaining honors constantly, the art troupe takes music, drama and dance as language, participates foreign and domestic culture communication activities and national important performances actively.



Menu of Folk Music Show

- | | |
|----------------|---|
| 1. 民乐合奏《喜洋洋》 | Folk Music Ensemble“Jubilance” |
| 2. 民乐合奏《彩云追月》 | Folk Music Ensemble“caiyunzhuiyue” |
| 3. 京胡与乐队《京调》 | Jinghu and Orchestra “Beijing Melody” |
| 4. 笛子与乐队《牧民新歌》 | Flute and Orchestra“The song of Herdsmen” |
| 5. 二胡齐奏《战马奔腾》 | Erhu Ensemble “Zhanmabengteng” |
| 6. 琵琶合奏《阳春白雪》 | Pipa Ensemble “Spring Snow” |
| 7. 二胡与乐队《二泉映月》 | Erhu and Orchestra “Er Quan Ying Yue” |
| 8. 民乐合奏《瑶族舞曲》 | Folk Music Ensemble “Yaozuwuqu” |
| 9. 民乐合奏《牧马少年》 | Folk Music Ensemble “Wrangler Junior” |
| 10. 民乐合奏《丰收之歌》 | Folk Music Ensemble “Song of Harvest” |

Conference Venue and Sponsors

School of Economics and Management, Beijing Jiaotong University



Since its founding in 1896, Beijing Jiaotong University has become a nationally recognized institution for its high reputations in diverse academic areas. The university takes the discipline areas of engineering and management as its foundation, and the discipline groups of information and communications, management and economics as its main characteristics. Economics and management is a long-standing discipline developed in parallel with the growth of the university. The School of Economics and Management, one of the nine schools of the university, was first established in 1996, by combining the former School of Economics, Department of Material Management Engineering, and Department of Industry and Construction Management Engineering.

The School of Economics and Management has made brilliant achievements by acting on the 100-year plan for developing the disciplines, working for building itself into the first-rate domestic school of the type, which regards it as its own duty to nurture the most outstanding personnel who blaze new trails. It generates new learning that holds the lead, and serves a new economy and society. The School adheres to the kernel ideal of creativity, devotion, magnanimity, love and harmony. It is an upholder of the pioneering spirit, and will ceaselessly keep forging ahead.

At present, the School has a faculty of 221 members, including one academican of the Chinese Academy of Engineering, one advisor of the State Council, one specially invited Professor from Yangtze River Scholar, one member of the Discipline Evaluation Workgroup of the State Council Degree Committee, three members of the National Teaching Advisory Committee of the Ministry of Education, 40 full professors and 86 associate professors. It has more than 4000 students. Within the School, there are the Department of Economics, Department of Accounting, Department of Enterprise Management, Department of Information Management, Department of Logistics Management, Department of Tourism Management, Department of Engineering Management, Department of Public Administration, Department of Finance, Sino-Australia Business School as well as Professional Degree Education Center. There are 20 education and research institutes of various descriptions including the Institute of Transportation Economic Theories and Policies, Institute of Development Strategy, Research Center of Acquisition and Restructuring of Chinese Enterprises, Institute of Labor Economics and Human Resource Management, Institute of Value added Logistics, etc.

At present, there are three postdoctoral research stations, three first-level and ten second-level sites for Ph.D., four first-level sites for Master's Degree and 11 sites for Professional Master's Degree. The School offers 11 specialties for undergraduates, of which Industrial Economics is a key discipline of the nation, and Management Science and Engineering as well as Enterprise Management key disciplines of Beijing. The School has one key research based in Philosophy and Social Science in Beijing.

The School has established cooperative relationship with many different universities in diverse areas, including student exchange program, visiting scholar program, case-sharing program, and Joint MBA program. Also, the school has established strategy cooperation relationship with many famous universities around the world.



UFIDA Software Co., Ltd



Founded in 1988, UFIDA Software Co., Ltd. has been devoting itself to bringing optimal management practices based on state-of-the-art IT technology to management and business innovation activities of its clients, and has been a leading supplier of proprietary enterprise management/ERP software, service and solutions. UFIDA went public in May 2001 in Shanghai Stock Exchange. The company was honored a state-level Key Software Enterprise in 2004. We are proud to say that we are the most representative enterprise in China's software industry and UFIDA has become one of the best-known brands of the industry.

General Information

Welcome Desk/On-site Registration

Wednesday 8 – Open from 14:00 to 17:00

Thursday 9 – Open from 8:30 to 18:00

Friday 10 – Open from 8:30 to 18:00

Saturday 11 – Open from 8:30 to 18:00

Opening Session

Thursday 9, at 09:10 in the ICC-R room.

Welcome Cocktail

Thursday 9, at 18:00 in the ICC-M room.

Meals

Coffee-breaks will be served to all registered participants.

Lunches will be served from 12:15 to 13:45 to all registered participants.

Secretariat Contacts

ENASE Secretariat

Address: Av. D.Manuel I, 27A 2º esq.

2910-595 Setúbal, Portugal

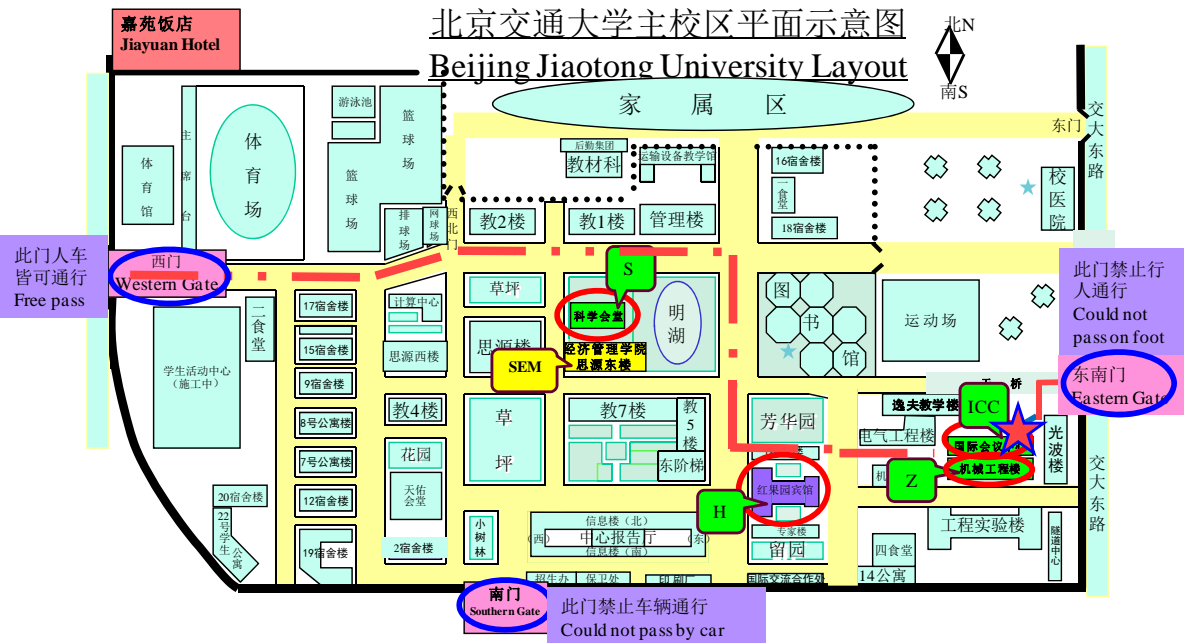
Tel.: +351 265 520 185

Fax: +44 203 014 5433

e-mail: enase.secretariat@insticc.org

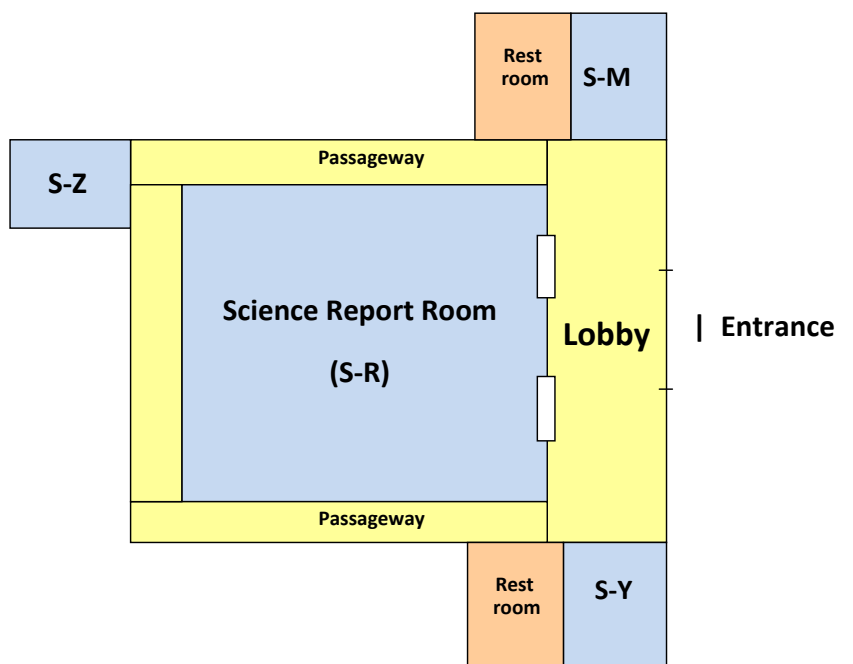
website: <http://www.enase.org>

Rooms Layout



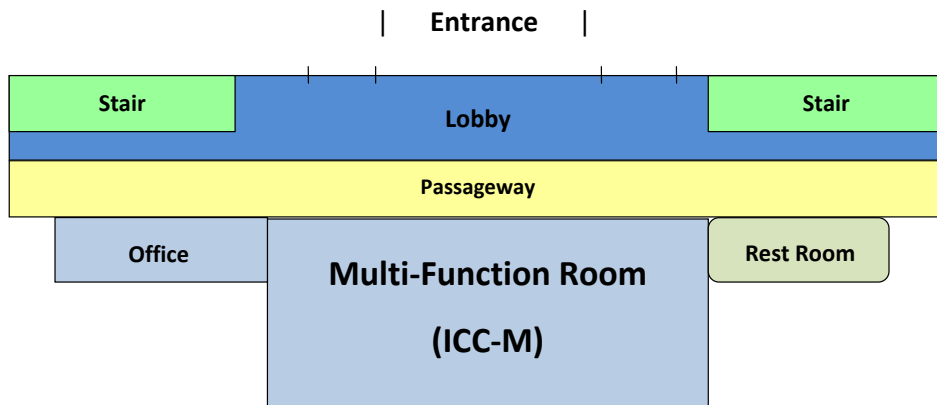
- ★ ICC: International Conference Center
- S: Science and Technology Hall
- Z: School of Mechanical, Electronic and Control engineering
- H: Hong Guoyuan Hotel
- SEM: School of Economics and Management

S: Science and Technology Hall

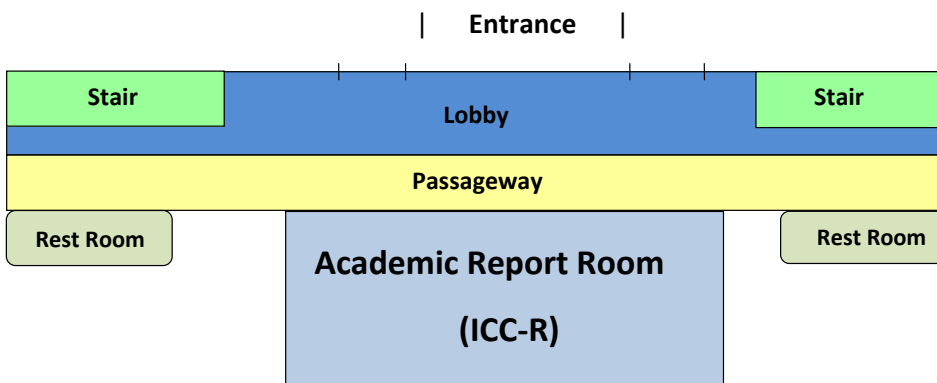




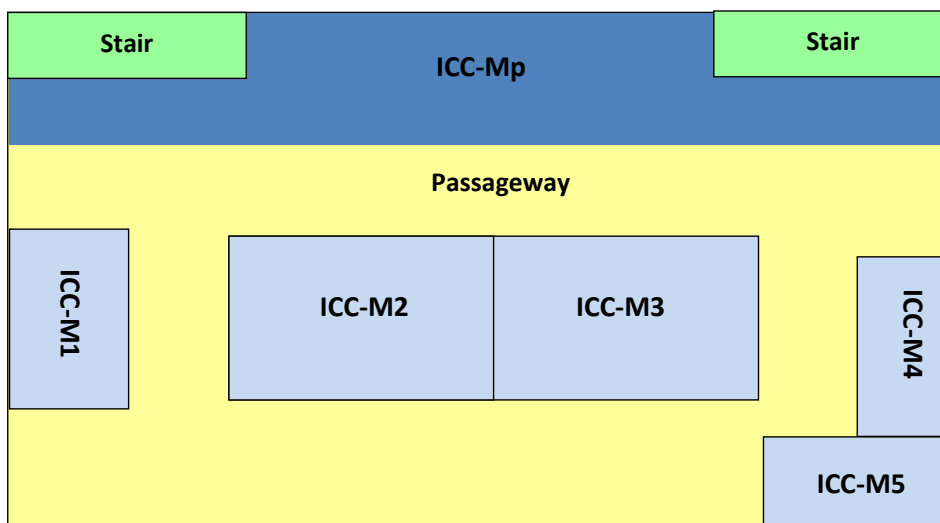
FLOOR 1 (Ground Floor)



FLOOR 2

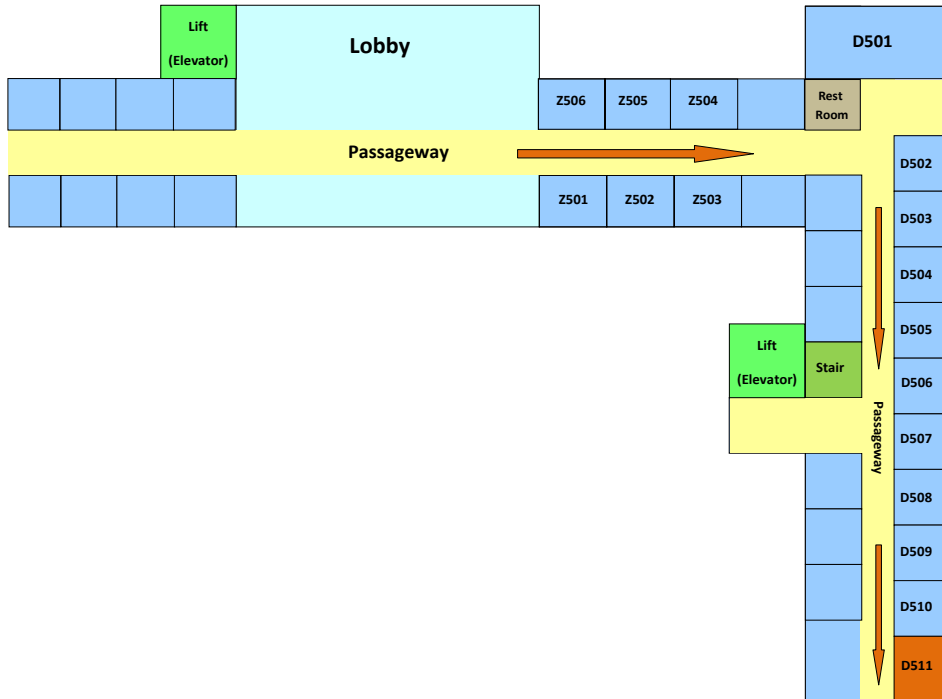


BASEMENT 1

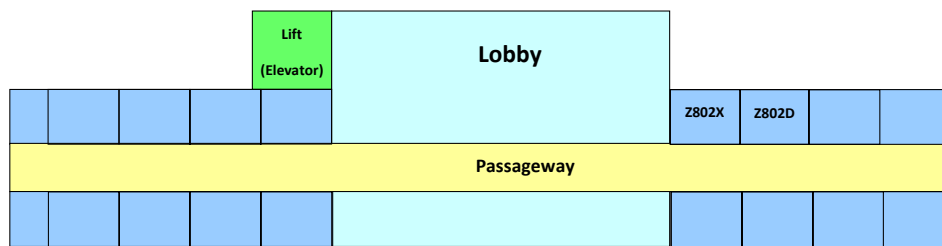


Z: School of Mechanical, Electronic and Control engineering

FLOOR 5



FLOOR 8



Program Layout

Wednesday 8		Thursday 9		Friday 10		Saturday 11	
		08:30	Welcome Desk / Registration	08:30	Welcome Desk / Registration	08:30	Welcome Desk / Registration
		09:10	Conference Opening Session and Panel	09:00	Keynote Lecture Prof. Yulin Zheng	09:00	Keynote Lecture Prof. Kecheng Liu
		09:30	Photo Session				
		10:00	Keynote Lecture Prof. Xuewei Li	10:00	Keynote Lecture Prof. Yannis Phillis	10:00	Keynote Lecture Prof. Harold Krikke
		11:00	Posters 1 C.-Break	11:00	C.-Break	11:00	C.-Break
		11:15	Keynote Lecture Prof. ShouBo Xu	11:15	Keynote Lecture Prof. Leszek Maciaszek	11:15	
		12:15	Lunch	12:15	Lunch	12:15	Lunch
14:00	Welcome Desk / Registration	13:45	Parallel Sessions 1	13:45	Parallel Sessions 3	13:45	Parallel Sessions 5
		15:45	Coffee-Break	15:45	Coffee-Break	15:45	Coffee-Break
		16:00	Parallel Sessions 2	16:00	Parallel Sessions 4	16:00	Parallel Sessions 6
17:00		18:00	Welcome Cocktail	18:00		18:00	
				18:30	Social Event and Banquet		
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Thursday Sessions

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Panel
09:15 - 09:30 Room ICC-R

10:00 - 11:00 Room ICC-R
RAILWAY LOGISTICS VALUE EXTENSION
THEORY
Keynote Speaker: Xuewei Li

RAILWAY LOGISTICS VALUE EXTENSION THEORY

Xuewei Li

Beijing Jiaotong University, China

Paper 75
11:00 - 11:15 ICC-MP
Poster Session 1

TO CONTAIN COST, LET'S NOT OVER BUILD OUR SOFTWARE SOLUTIONS

Jie Liu

Western Oregon University, Monmouth, U.S.A.

Keywords: Project management, Software engineering, Cost estimations, System requirements, Quality control.

11:15 - 12:15 Room ICC-R
MANAGEMENT: A SCIENTIFIC DISCIPLINE FOR
HUMANITY
Keynote Speaker: Shoubo Xu

MANAGEMENT: A SCIENTIFIC DISCIPLINE FOR HUMANITY

Shoubo Xu

*Chinese Academy of Engineering / Beijing Jiaotong
University, China*

Paper 16
13:45 - 15:45 Room ICC-R
Session 1

A TYPE SAFE DESIGN TO ALLOW THE SEPARATION OF DIFFERENT RESPONSIBILITIES INTO PARALLEL HIERARCHIES

Francisco Ortin and Miguel García

University of Oviedo, Oviedo, Spain

Keywords: Design patterns, Refactoring, Software design, Parametric polymorphism, Generics.

Paper 10
13:45 - 15:45 Room ICC-R
Session 1

SEEDED FAULTS AND THEIR LOCATIONS DESIGN USING BAYES FORMULA AND PROGRAM LOGIC IN SOFTWARE TESTING

Wang Lina^{1,2}, Tian Jie³ and Li Bo¹

¹ *Beihang University, Beijing, China*

² *Beijing Aerospace Automatic Control Institute, Beijing,
China*

³ *CPAPF, Beijing, China*

Keywords: Software testing, Fault seeding, Procedural language, Fault classification.

Paper 50
13:45 - 15:45 Room ICC-R
Session 1

HOW EFFECTIVE IS MODEL CHECKING IN PRACTICE?

TheAnh Do, A. C. M. Fong and Russel Pears

*Auckland University of Technology, Auckland, New
Zealand*

Keywords: Formal methods, Static analysis, Model checking, Hardware verification, Software verification.

Paper 45
13:45 - 15:45 Room ICC-R
Session 1

A COMPARATIVE OF GOAL-ORIENTED APPROACHES TO MODELLING REQUIREMENTS FOR COLLABORATIVE SYSTEMS

Miguel A. Teruel, Elena Navarro, Víctor
López-Jaquero, Francisco Montero and Pascual
González

University of Castilla - La Mancha, Albacete, Spain

Keywords: Goal-Oriented, KAOS, NFR, i*, Collaborative Systems, CSCW, Awareness, Requirements Engineering, Non-Functional Requirements, Quality.

Paper 36
13:45 - 15:45
Session 1
Room ICC-R

INTERACTION CENTRIC REQUIREMENTS TRACEABILITY

Nitesh Narayan, Yang Li, Jonas Helming and Maximilian Koegel

Technische Universität München, Garching, Germany

Keywords: Requirements traceability, Interaction, Artifacts, UNICASE, Model.

Paper 31
16:00 - 18:00
Session 2
Room ICC-R

ROBUSTIFYING THE SCRUM AGILE METHODOLOGY FOR THE DEVELOPMENT OF COMPLEX, CRITICAL AND FAST-CHANGING ENTERPRISE SOFTWARE

Marcos Vescovi¹, Flavio Varejão² and Vagner Cordeiro¹

¹ *Finansolo Software, CA, U.S.A.*

² *Universidade Federal do Espírito Santo, Vitória, Brazil*

Keywords: Agile methods, Scrum methodology, Software design, Software entropy, Change curve.

Paper 54
16:00 - 18:00
Session 2
Room ICC-R

EXTENDED METADATA FOR DATA WAREHOUSE SCHEMA

N. Parimala and Vinay Gautam

Jawaharlal Nehru University, New Delhi, India

Keywords: Data warehouse, E-Metadata, Ontology.

Paper 28
16:00 - 18:00
Session 2
Room ICC-R

ADVANCES IN STRUCTURE EDITORS Do They Really Pay Off?

Andreas Gomolka and Bernhard G. Humm

Hochschule Darmstadt, University of Applied Sciences, Darmstadt, Germany

Keywords: Programming, Structure editor, Evaluation, Lisp, Eclipse.

Paper 70
16:00 - 18:00
Session 2
Room ICC-R

TRANSFORMING ATTRIBUTE AND CLONE-ENABLED FEATURE MODELS INTO CONSTRAINT PROGRAMS OVER FINITE DOMAINS

Raúl Mazo^{1,2}, Camille Salinesi¹, Daniel Diaz¹ and Alberto Lora-Michiels³

¹ *Panthéon Sorbonne University, Paris, France*

² *Universidad de Antioquia, Medellín, Colombia*

³ *Baxter International Inc., Lessines, Belgium*

Keywords: Requirement engineering, Product line models, Feature models, Transformation, Constraint programming.

Paper 67
16:00 - 18:00
Session 2
Room ICC-R

HYBRID ZIA AND ITS APPROXIMATED REFINEMENT RELATION

Zining Cao^{1,2,3} and Hui Wang¹

¹ *National Key Laboratory of Science and Technology on Avionics System Integration, Shanghai, China*

² *Nanjing University of Aero. & Astro, Nanjing, China*

³ *Soochow University, Suzhou, China*

Keywords: Interface automata, Z notation, Hybrid automata, Approximated refinement relation.

Friday Sessions

09:00 - 10:00 Room ICC-R
INTO THE CLOUD ENTERPRISES
 Keynote Speaker: Yulin Zheng

INTO THE CLOUD ENTERPRISES

Yulin Zheng
UFIDA Software Co., Ltd, Beijing, China

10:00 - 11:00 Room ICC-R
A SYSTEM-OF-SYSTEMS APPROACH TO THE ANALYSIS AND CONTROL OF SUSTAINABILITY
 Keynote Speaker: Yannis A. Phillis

A SYSTEM-OF-SYSTEMS APPROACH TO THE ANALYSIS AND CONTROL OF SUSTAINABILITY

Yannis A. Phillis
Technical University of Crete, Chania, Greece

11:15 - 12:15 Room ICC-R
ON COMPLEXITY OF EVENT-DRIVEN SERVICE SYSTEMS
 Keynote Speaker: Leszek Maciaszek

ON COMPLEXITY OF EVENT-DRIVEN SERVICE SYSTEMS

Leszek Maciaszek
Macquarie University, Sydney, Australia

Paper 68 Room ICC-R
 13:45 - 15:45 Session 3

A NEW AGILE PROCESS FOR WEB DEVELOPMENT

Vinícius Pereira and Antonio Francisco do Prado
Federal University of Sao Carlos, Sao Carlos, Brazil

Keywords: Agile Process, User Story, Navigation Model, Web Development.

Paper 44 Room ICC-R
 13:45 - 15:45 Session 3

MODEL-DRIVEN TESTING

Transformations from Test Models to Test Code

Beatriz Pérez Lamancha, Pedro Reales Mateo,
 Macario Polo

Castilla-La Mancha University, Ciudad Real, Spain

Danilo Caivano

Università degli Studi, Bari, Italy

Keywords: Model-driven testing, Model-based testing, UML testing profile, Transformation, Model to text transformation, MOFScript, xUnit, JUnit.

Paper 19 Room ICC-R
 13:45 - 15:45 Session 3

A CRITICAL COMPARISON OF EXISTING SOFTWARE CONTRACT TOOLS

Janina Voigt, Warwick Irwin and Neville Churcher
University of Canterbury, Christchurch, New Zealand

Keywords: Software contracts, Design by contract, Formal software specification.

Paper 20 Room ICC-R
 13:45 - 15:45 Session 3

MICROSSB: A LIGHTWEIGHT FRAMEWORK FOR ON-LINE DISTRIBUTED APPLICATION BASED ON SOFT SYSTEM BUS

Jian Xiao¹, Jizhou Sun¹, Gang Li¹, Chun Li¹, Sen Li¹ and Jingde Cheng²

¹ *TianJin University, Tianjin, China*

² *Saitama University, Saitama, Japan*

Keywords: Persistent Computing, Soft system bus, Software development methodology, Middleware, On-line distributed application.

Paper 51
13:45 - 15:45
Session 3
Room ICC-R

**A MIDDLEWARE BASED, POLICY DRIVEN
ADAPTATION FRAMEWORK TO SIMPLIFY
SOFTWARE EVOLUTION**

N. H. Awang, W. M. N Wan Kadir and S.
Shahibuddin

*Faculty of Computer Science and Information System,
Universiti Teknologi Malaysia, Johor Baharu, Malaysia*

Keywords: Software evolution, Software adaptation,
Middleware, Web service, Close-loop feedback
system.

Paper 27
16:00 - 18:00
Session 4
Room ICC-R

**EXECUTION MEASUREMENT-DRIVEN
CONTINUOUS IMPROVEMENT OF BUSINESS
PROCESSES IMPLEMENTED BY SERVICES**

Andrea Delgado

*Faculty of Engineering, University of the Republica,
Montevideo, Uruguay*

Barbara Weber

University of Innsbruck, Innsbruck, Austria

Francisco Ruiz, Ignacio García Rodríguez de
Guzmán

University of Castilla-La Mancha, Ciudad Real, Spain

Keywords: Business Process Management (BPM),
Service Oriented Computing (SOC), Business
process execution measures, Continuous business
process improvement.

Paper 34
16:00 - 18:00
Session 4
Room ICC-R

**BUSINESS PROCESS MODEL IMPROVEMENT
BASED ON MEASUREMENT ACTIVITIES**

Laura Sánchez-González, Francisco Ruiz, Félix
García and Mario Piattini

University of Castilla La Mancha, Ciudad Real, Spain

Keywords: Business process, Measurement, Con-
tinuous improvement, BPMN.

Paper 52
16:00 - 18:00
Session 4
Room ICC-R

**TOWARDS TECHNOLOGY INDEPENDENT
STRATEGIES FOR SOA IMPLEMENTATIONS**

Zheng Li

*School of Computer Science, ANU and NICTA, Canberra,
Australia*

He Zhang

*School of Computer Science and Engineering, UNSW and
NICTA, Sydney, Australia*

Liam O'Brien

*School of Computer Science, ANU and CSIRO, Canberra,
Australia*

Keywords: Service-Oriented Architecture (SOA),
SOA implementation, Organization theory, Organi-
zation design, Strategy.

Paper 33
16:00 - 18:00
Session 4
Room ICC-R

**AN ADAPTABLE BUSINESS COMPONENT
BASED ON PRE-DEFINED BUSINESS
INTERFACES**

Oscar M. Pereira, Rui L. Aguiar

University of Aveiro, Aveiro, Portugal

Maribel Yasmina Santos

University of Minho, Guimarães, Portugal

Keywords: Component-based software, Adaptabil-
ity, Business tier, Databases, Impedance mismatch.

Saturday Sessions

09:00 - 10:00 Room ICC-R
 INFORMATION MAKES SPACES FOR WORKING
 AND LIVING INTELLIGENT - A Semiotic
 Perspective
 Keynote Speaker: Kecheng Liu

**INFORMATION MAKES SPACES FOR WORKING
 AND LIVING INTELLIGENT
 A Semiotic Perspective**

Kecheng Liu
University of Reading, Reading, U.K.

10:00 - 11:00 Room ICC-R
 INCREASING YOUR RATE OF RETURN WITH
 CLOSED LOOP SUPPLY CHAINS
 Keynote Speaker: Harold Krikke

**INCREASING YOUR RATE OF RETURN WITH
 CLOSED LOOP SUPPLY CHAINS**

Harold Krikke
Tilburg University, The Netherlands

Paper 55 Room ICC-R
 13:45 - 15:45
 Session 5

**CORRECT MATCHING OF COMPONENTS WITH
 EXTRA-FUNCTIONAL PROPERTIES
 A Framework Applicable to a Variety of
 Component Models**

Kamil Ježek and Přemek Brada
University of West Bohemia, Pilsen, Czech Republic

Keywords: Software components, Extra-functional properties, Compatibility, Inter-component binding, Framework.

Paper 30 Room ICC-R
 13:45 - 15:45
 Session 5

**INTERACTIVE COMPONENT VISUALIZATION
 Visual Representation of Component-based
 Applications using the ENT Meta-model**

Jaroslav Šnajberk and Přemek Brada
University of West Bohemia, Pilsen, Czech Republic

Keywords: Component, Visualization, UML, Meta-model, Views, Content-aware.

Paper 5 Room ICC-R
 13:45 - 15:45
 Session 5

**ON THE PREDICTABILITY OF SOFTWARE
 EFFORTS USING MACHINE LEARNING
 TECHNIQUES**

Wen Zhang, Ye Yang and Qing Wang
Chinese Academy of Sciences, Beijing, China

Keywords: Software effort prediction, K-medoids, BPNN, Data imputation.

Paper 32 Room ICC-R
 13:45 - 15:45
 Session 5

**AN EVALUATION FRAMEWORK FOR
 VALIDATING ASPECTUAL PERSVASIVE
 SOFTWARE SERVICES**

Dhaminda B. Abeywickrama and Sita Ramakrishnan
Monash University, Melbourne, Australia

Keywords: Pervasive services, Model-driven development, Model checking, Aspect-oriented modeling.

Paper 35 Room ICC-R
 16:00 - 18:00
 Session 6

**SOFTWARE EFFORT ESTIMATION MODEL
 BASED ON USE CASE SPECIFICATION**

Xinguang Chen, Fengdi Shu and Ye Yang
*Institute of Software Chinese Academy of Sciences,
 Beijing, China*

Keywords: Use case, Software effort, Use case specification, Software estimation.

Paper 59 Room ICC-R
 16:00 - 18:00
 Session 6

**EFFECT OF NON-WORK RELATED INTERNET
 USAGE ON STIMULATING EMPLOYEE
 CREATIVITY IN THE SOFTWARE INDUSTRY**

Sachitha I. P. Gunawardena and Sanath Jayasena
University of Moratuwa, Moratuwa, Sri Lanka

Keywords: Non-Work Related Computing, Non-Work Related Internet Usage, Creativity Stimulation, Software Industry.

Paper 38 16:00 - 18:00 Session 6	Room ICC-R
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TEAM RADAR
Visualizing Team Memories

Cong Chen and Kang Zhang

University of Texas at Dallas, Richardson, U.S.A.

Keywords: Collaboration, Workspace Awareness, Visualization, Software Configuration Management.

Paper 17 16:00 - 18:00 Session 6	Room ICC-R
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**INCENTIVES AND PERFORMANCE IN
LARGE-SCALE LEAN SOFTWARE
DEVELOPMENT**
An Agent-based Simulation Approach

Benjamin S. Blau, Tobias Hildenbrand, Matthias
Armbruster, Martin G. Fassunge
SAP AG, Walldorf, Germany

Yongchun Xu, Rico Knapper

*Research Center for Information Technology, Karlsruhe,
Germany*

Keywords: Lean, Agile, Agent-based simulation, Performance, Incentive.

Workshops

3rd International Workshop on Model-Driven Architecture and Modeling-Driven Software Development - MDA & MDSD

Thursday, 9

09:10 – 12:15

Room: ICC-M4

Saturday 10

09:00 – 11:00

Room: ICC-M4

Workshop Co-chairs:

Janis Osis, Riga Technical University, Latvia

Oksana Nikiforova, Riga Technical University, Latvia

SCOPE AND TOPICS

The workshop is aimed at theoretical and practical aspects of OMG's Model Driven Architecture, the Modeling-Driven Software Development, and Model-Driven Engineering as well. The first Workshop "Model - Driven Architecture: Foundations, Practices and Implications (MDA 2009)" was organized in conjunction with the 13th Conference on Advances in Data Base and Information Systems (ADBIS 2009) in Riga (Latvia), the 2nd "Model-Driven Architecture and Modeling Theory-Driven Development - MDA & MTDD 2010" was organized in conjunction with the 5th ENASE 2010 conference in Athens (Greece).

Topics of interest include, but are not limited to:

- Reasoning about Models
- Computation Independent Model - knowledge model (pre-CIM)
- Computation Independent Model – business model
- Computation Independent Model – business requirements for the system
- Formalization of deriving use-cases from the CIM-business model
- Modeling theory-driven development of software
- Reconciling software requirements and architectures within MDA
- Modeling formalization of MDA's software development
- Model transformation and code generation
- Modeling of requirements, architectures, platforms
- Model based techniques to guarantee the quality and efficiency of software development
- Domain modeling approaches in information systems engineering
- Model-Driven domain modeling, analysis and software development
- Concurrent model-driven automation engineering
- Domain-Specific Modeling Languages (DSMLs)
- Models for software product lines
- Models for web service design
- MDA-based distributed real-time and embedded systems
- Recovering reliable safety properties from system models
- Modeling for testing and validation
- Innovations and improvements of MDA
- MDA Tools

Program Committee

Attila Adamko, University of Debrecen, Hungary
Erika Asnina, Riga Technical University, Latvia
Sofia Azevedo, Universidade do Minho, Portugal
Liliana Dobrica, University Politehnica of Bucharest, Romania
Irene Garrigos, University of Alicante, Spain
Jeff Gray, University of Alabama, U.S.A.
Petr Hnetynka, Charles University, Czech Republic
Tharaka Ilayperuma, University of Ruhuna, Sri Lanka
Audris Kalnins, University of Latvia, IMCS, Latvia
Lajos Kollár, University of Debrecen, Hungary
Ricardo J. Machado, Universidade do Minho, Portugal
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Oksana Nikiforova, Riga Technical University, Latvia
Eila Ovaska, VTT Technical research Centre of Finland, Finland
Claus Pahl, Dublin City University, Ireland
Bazil Parv, Babes-Bolyai University, Romania
Douglas Schmidt, Vanderbilt University, U.S.A.
Janis Silins, Mailmaster Ltd, Latvia
Ragnhild Van Der Straeten, Vrije Universiteit Brussel, Belgium
Uldis Sukovskis, Riga Technical University, Latvia
Jelena Zdravkovic, Stockholm University, Sweden

Technical Program

Thursday 9		Friday 10	
08:30	Welcome Desk / Registration	08:30	Welcome Desk / Registration
09:10	Parallel Session 1	09:00	Parallel Session 3
11:00	C.-Break	11:00	C.-Break
11:15	Parallel Session 2	11:15	
12:15	Lunch	12:15	Lunch
13:45		13:45	
18:00	Welcome Cocktail		
		18:30	Social Event and Banquet
		23:00	

Final Program

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Thursday Sessions

Paper 6
09:10 - 11:00
Session 1
Room ICC-M4

**Backward Requirements Traceability within the
Topology-based Model Driven Software
Development**

Erika Asnina, Bernards Gulbis, Janis Osis, Gundars
Alksnis, Uldis Donins and Armands Slihte
Riga Technical University, Riga, Latvia

Paper 4
11:15 - 12:15
Session 2
Room ICC-M4

**On the Use of UML Stereotypes in Creating
Higher-order Domain-specific Languages and
Tools**

Edgars Rencis and Janis Barzdins
*Institute of Mathematics and Computer Science,
University of Latvia, Riga, Latvia*

Paper 3
09:10 - 11:00
Session 1
Room ICC-M4

Behavior Model Mapping

Judith Michael and Heinrich C. Mayr
Alpen-Adria-Universität, Klagenfurt, Austria

Paper 9
09:10 - 11:00
Session 1
Room ICC-M4

**Several Issues on the Definition of Algorithm for
the Layout of the UML Class Diagrams**

Arhur Galapovs and Oksana Nikiforova
*Riga Technical University, Faculty of Computer Science
and Information Technology, Riga, Latvia*

Paper 8
09:10 - 11:00
Session 1
Room ICC-M4

**Practical Experiments with Code Generation
from the UML Class Diagram**

Janis Sejans and Oksana Nikiforova
*Riga Technical University, Faculty of Computer Science
and Information Technology, Riga, Latvia*

Paper 10
11:15 - 12:15
Session 2
Room ICC-M4

**Towards the Refinement of Topological Class
Diagram as a Platform Independent Model**

Uldis Donins, Janis Osis, Armands Slihte, Erika
Asnina and Bernards Gulbis
Riga Technical University, Riga, Latvia

Friday Sessions

Paper 5
09:00 - 11:00 Room ICC-M4
Session 3

Model-driven Testing Approach for Embedded Systems Specifics Verification based on UML Model Transformation

Jurijs Grigorjevs

Riga Technical University, Faculty of Computer Science and Information Technology, Riga, Latvia

Paper 7
09:00 - 11:00 Room ICC-M4
Session 3

Knowledge Integration for Domain Modeling

Armands Slihte, Janis Osis and Uldis Donins
Institute of Applied Computer Systems, Riga Technical University, Riga, Latvia

Paper 11
09:00 - 11:00 Room ICC-M4
Session 3

Advancements of the Topological Functioning Model for Model Driven Architecture Approach

Armands Slihte, Uldis Donins, Janis Osis, Erika Asnina and Bernards Gulbis
Institute of Applied Computer Systems, Riga Technical University, Riga, Latvia

1st International Workshop on Evidential Assessment of Software Technologies - EAST 2011

Thursday 9

09:10 – 12:15

Room: ICC-M1

Friday 10

09:00 – 11:00

Room: ICC-M1

Workshop Co-chairs:

He Zhang, National ICT Australia, University of New South Wales, Australia

Ye Yang, Institute of Software, Chinese Academy of Sciences, China

Reidar Conradi, Norwegian University of Science and Technology, Norway

SCOPE AND TOPICS

The workshop is aimed at bringing together both researchers and practitioners in software engineering (SE), empiricists and theorists in research community, to discuss the rigor, relevance, experience and challenges of adopting empirical and evidence-based research methodologies in SE, as well as investigate the relation between the both. To be specific for Asia-Pacific, the overall goal of the workshop is also to conclude the status of empirical and evidence-based research in this region, and further develop a common research agenda for increasing the quality of empirical research and fostering the adoption of evidence-based practice in this region.

The workshop intends to investigate a number of aspects associated with empirical and evidence-based research in SE since the emergence of EBSE:

- What is currently known about the methodological strengths and limitations of evidence-based practice for SE?
- How rigorous and relevant are the empirical and evidential assessments reported in SE so far?
- What are the challenges of the adoption of empirical and evidence-based methodologies in SE?
- What are the impacts of evidence-based practice on the current empirical research in SE?
- What are the improvements proposed for maturing the empirical and evidential research methodologies in SE?
- Particularly, what is the state-of-the-practice of empirical and evidence-based SE research in Asia-Pacific region?

The workshop seeks quality empirical research and experience in software engineering from both academia and industry that address the topics of interest like (but are not limited to):

- Evidential Assessments on the Rigor, Effectiveness, and Relevance of a Variety of Software Technologies
- Roles of Empirical and Evidence-based Practices (e.g., SLRs) in SE Research
- Systematic Literature Reviews in SE
- Empirical Primary Studies in SE
- Experiences in Transferring Evidence and Empirical Knowledge into Software Practice
- Challenges in Adopting Empirical and Evidence-based Methods in SE Research and Practice
- Areas where Future Empirical Studies are Needed
- Methods for Appraising and Ensuring the Relevance of Evidence-based Research, particularly SLRs, for Software Practice
- Research Agenda for Maturing and Enriching Empirical and Evidence-based Practice for SE

Program Committee

Muhammad Ali Babar, IT University of Copenhagen, Denmark
Sarah Beecham, Lero, University of Limerick, Ireland
Oscar Dieste, Polytechnic University of Madrid, Spain
Tracy Hall, Brunel University, United Kingdom
Barbara Kitchenham, Keele University, United Kingdom
Emilia Mendes, University of Auckland, New Zealand
Mahmood Niazi, Keele University, United Kingdom
Beijun Shen, Shanghai Jiaotong University, China
Mark Staples, National ICT, Australia
Guilherme Travassos, Universidade Federal do Rio de Janeiro, Brazil
Yasha Wang, Peking University, China
Hongyu Zhang, Tsinghua University, China
Yunming Zhou, Nanjing University, China

Technical Program

Thursday 9		Friday 10	
08:30	Welcome Desk / Registration	08:30	Welcome Desk / Registration
09:10	Parallel Session 1	09:00	Parallel Session 3
11:00	C.-Break	11:00	C.-Break
11:15	Parallel Session 2	11:15	
12:15	Lunch	12:15	Lunch
13:45		13:45	
18:00	Welcome Cocktail		
		18:30	Social Event and Banquet
		23:00	

Final Program

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Thursday Sessions

Paper 13
09:10 - 11:00
Session 1
Room ICC-M1

A Novel Approach to Quantifying the Influence of Software Process on Project Performance

Jia-kuan Ma, Xiao-fan Tong, Ya-sha Wang
Ministry of Education, Beijing, China
Software Institute, School of Electronics Engineering and Computer Science Peking University, Beijing, China

Gang Li

Shandong Computer Science Center, Jinan, China
Shandong Provincial Key Laboratory of Computer Network, Jinan, China

Paper 6
11:15 - 12:15
Session 2
Room ICC-M1

Mutation Selection: Some Could be Better than All

Zhiyi Zhang^{1,2}, Dongjiang You^{1,2}, Zhenyu Chen^{1,2},
Yuming Zhou¹ and Baowen Xu¹
¹ *Nanjing University, Nanjing, China*
² *Software Institute, Nanjing University, Nanjing, China*

Paper 10
09:10 - 11:00
Session 1
Room ICC-M1

Investigating the Benefits of Combining PSP with Agile Software Development

Wenrong Yang, Mengjiao Shen, Han Su, Guoping Rong and Dong Shao
Software Institute of Nanjing University, Nanjing, China

Paper 9
09:10 - 11:00
Session 1
Room ICC-M1

Measuring and Improving IT Service Support Processes: A Case Study

Kai Zhou and Beijun Shen
School of Software, Shanghai Jiaotong University, Shanghai, China

Paper 4
11:15 - 12:15
Session 2
Room ICC-M1

Validating Search Processes in Systematic Literature Reviews

Barbara Kitchenham
Keele University, Staffs, U.K.

Zhi Li

Guangxi Normal University, Guangxi, China
Peking University, Beijing, China

Andrew Burn
Durham University, Durham, U.K.

Friday Sessions

Paper 8
09:00 - 11:00 Room ICC-M1
Session 3

Circumstantial-evidence-based Judgment for Software Effort Estimation

Zheng Li^{1,2}, Liam O'Brien^{2,3} and He Zhang^{4,1}

¹ NICTA, Sydney, Australia

² School of CS, ANU, Canberra, Australia

³ CSIRO, Canberra, Australia

⁴ School of CSE, UNSW, Sydney, Australia

Paper 5
09:00 - 11:00 Room ICC-M1
Session 3

Find the Best Greedy Algorithm with Base Choice Experiments for Covering Array Generation

Jing Jiang and Changhai Nie

*The State Key Laboratory for Novel Software Technique,
Nanjing University, Nanjing, China*

Paper 11
09:00 - 11:00 Room ICC-M1
Session 3

A Case Study of using WikiWinWin into Bug Negotiation

Peng Wan, Juan Li and Yin Li

*Institute of Software, Chinese Academy of Sciences,
Beijing, China*

Paper 12
09:00 - 11:00 Room ICC-M1
Session 3

APIS - A Web-based System for PSP/TSP

Chenyi Zhuang, Jingyi Li, Guoping Rong and Dong Shao

Software Institute of Nanjing University, Nanjing, China

