### COMPSAC 2012: Program at a Glance

#### July 16: Workshop Day

**Room**

<table>
<thead>
<tr>
<th>8:30-9:30</th>
<th>Karşıyaka 1</th>
<th>Bergama 2</th>
<th>Bergama 3</th>
<th>Didim</th>
</tr>
</thead>
<tbody>
<tr>
<td>MidArch, SSS, METHOD: Invited Talk</td>
<td>QUORS 1</td>
<td>REFS 1</td>
<td>STA 1</td>
<td></td>
</tr>
</tbody>
</table>

**Room**

<table>
<thead>
<tr>
<th>9:30-10:00</th>
<th>Karşıyaka 1</th>
<th>Karşıyaka 2</th>
<th>Karşıyaka 3</th>
<th>Konak 1</th>
<th>Konak 2</th>
<th>Bergama 1</th>
<th>Bergama 2</th>
<th>Bergama 3</th>
<th>Didim</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSS 1</td>
<td>MidArch 1</td>
<td>METHOD 1</td>
<td>IWSC 1</td>
<td>CFSE 1</td>
<td>MVDA 1</td>
<td>QUORS 2</td>
<td>REFS 2</td>
<td>SAPSE 1</td>
<td>STA 2</td>
</tr>
<tr>
<td>SSS 2</td>
<td>MidArch 2</td>
<td>METHOD 2</td>
<td>IWSC2</td>
<td>CFSE 2</td>
<td>MVDA 2</td>
<td>QUORS 3</td>
<td>REFS 3</td>
<td>SAPSE 2</td>
<td>STA 3</td>
</tr>
</tbody>
</table>

**Room**

<table>
<thead>
<tr>
<th>10:00-12:00</th>
<th>Karşıyaka 1</th>
<th>Karşıyaka 2</th>
<th>Karşıyaka 3</th>
<th>Konak 1</th>
<th>Konak 2</th>
<th>Bergama 1</th>
<th>Bergama 2</th>
<th>Bergama 3</th>
<th>Didim</th>
</tr>
</thead>
<tbody>
<tr>
<td>SSS 3</td>
<td>MidArch 3</td>
<td>METHOD 3</td>
<td>IWSCE3</td>
<td>MVDA 3</td>
<td>QUORS 4</td>
<td>REFS 4</td>
<td>SAPSE 2</td>
<td>STA 4</td>
<td></td>
</tr>
</tbody>
</table>

#### Tuesday July 17: Conference Day 1

**Room**

<table>
<thead>
<tr>
<th>8:30 - 10:00</th>
<th>Konak I/2 (3rd floor)</th>
<th>Bergama I (3rd floor)</th>
<th>Bergama 2/2 (3rd floor)</th>
<th>Didim (3rd floor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grand Efes Ballroom (1st floor): Conference Welcome, Opening Remarks, Best Paper Awards</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Joint COMPSAC/SAINT Keynote: George Strawn</td>
<td></td>
<td></td>
<td></td>
<td>Panel</td>
</tr>
<tr>
<td>Chair: Carl Chang</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Room**

<table>
<thead>
<tr>
<th>10:00-10:30</th>
<th>Konak I/2 (3rd floor)</th>
<th>Bergama I (3rd floor)</th>
<th>Bergama 2/2 (3rd floor)</th>
<th>Didim (3rd floor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning Break: Smyrna Auditorium 1 (5th floor)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Room**

<table>
<thead>
<tr>
<th>10:30-12:00</th>
<th>Konak I/2 (3rd floor)</th>
<th>Bergama I (3rd floor)</th>
<th>Bergama 2/2 (3rd floor)</th>
<th>Didim (3rd floor)</th>
</tr>
</thead>
</table>

**Room**

<table>
<thead>
<tr>
<th>13:30-15:00</th>
<th>Konak I/2 (3rd floor)</th>
<th>Bergama I (3rd floor)</th>
<th>Bergama 2/2 (3rd floor)</th>
<th>Didim (3rd floor)</th>
</tr>
</thead>
</table>

**Room**

<table>
<thead>
<tr>
<th>15:00-15:30</th>
<th>Konak I/2 (3rd floor)</th>
<th>Bergama I (3rd floor)</th>
<th>Bergama 2/2 (3rd floor)</th>
<th>Didim (3rd floor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Afternoon Break: Smyrna Auditorium 1 (5th floor)</td>
<td></td>
<td></td>
<td></td>
<td>Panel</td>
</tr>
</tbody>
</table>

**Room**

<table>
<thead>
<tr>
<th>15:30-17:00</th>
<th>Konak I/2 (3rd floor)</th>
<th>Bergama I (3rd floor)</th>
<th>Bergama 2/2 (3rd floor)</th>
<th>Didim (3rd floor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Software Life Cycle, Evolution &amp; Maintenance 3</td>
<td>Security</td>
<td>Software Architecture &amp; Design 2</td>
<td>Panel</td>
<td></td>
</tr>
</tbody>
</table>

#### Wednesday July 18: Conference Day 2

**Room**

<table>
<thead>
<tr>
<th>8:30-10:00am</th>
<th>Konak I/2 (3rd floor)</th>
<th>Bergama I (3rd floor)</th>
<th>Bergama 2/3 (3rd floor)</th>
<th>Didim (3rd floor)</th>
<th>Smyrna 1 (5th floor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grand Efes Ballroom (1st floor): Joint COMPSAC/SAINT Keynote: Ross Anderson</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Panel</td>
</tr>
<tr>
<td>Chair: Elisa Bertino</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Room**

<table>
<thead>
<tr>
<th>10:00-10:30</th>
<th>Konak I/2 (3rd floor)</th>
<th>Bergama I (3rd floor)</th>
<th>Bergama 2/3 (3rd floor)</th>
<th>Didim (3rd floor)</th>
<th>Smyrna 1 (5th floor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Morning Break: Smyrna Auditorium 1 (5th floor)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Posts</td>
</tr>
</tbody>
</table>

**Room**

<table>
<thead>
<tr>
<th>10:30-12:00</th>
<th>Konak I/2 (3rd floor)</th>
<th>Bergama I (3rd floor)</th>
<th>Bergama 2/3 (3rd floor)</th>
<th>Didim (3rd floor)</th>
<th>Smyrna 1 (5th floor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Requirements Engineering</td>
<td>Panel</td>
<td>Formal Methods</td>
<td>Fast Abstracts: 10:15-12:30</td>
<td></td>
<td>Smyrna (5th floor)</td>
</tr>
</tbody>
</table>

**Room**

<table>
<thead>
<tr>
<th>12:00-13:30</th>
<th>Konak I/2 (3rd floor)</th>
<th>Bergama I (3rd floor)</th>
<th>Bergama 2/3 (3rd floor)</th>
<th>Didim (3rd floor)</th>
<th>Smyrna 1 (5th floor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Joint COMPSAC &amp; SAINT Planning Meeting</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>All welcome!</td>
</tr>
<tr>
<td>Location: Didim</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Room**

<table>
<thead>
<tr>
<th>13:30-15:00</th>
<th>Konak I/2 (3rd floor)</th>
<th>Bergama I (3rd floor)</th>
<th>Bergama 2/3 (3rd floor)</th>
<th>Didim (3rd floor)</th>
<th>Smyrna 1 (5th floor)</th>
</tr>
</thead>
<tbody>
<tr>
<td>COMPSAC/SAINT Joint Panel on Social Computing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Smyrna (5th floor)</td>
</tr>
</tbody>
</table>

#### Thursday July 19: Cloud Day
COMPSAC/SAINT will not host lunch. A list of nearby restaurants is available at the registration desk on the 1st floor near the Grand Efes Ballroom for reference.

Maps of the conference venue and the local area are available at the registration desk, on the 1st floor near the Grand Efes Ballroom.

Check the conference Twitter feed for updates: www.twitter.com/compsac

**Evening Events/Conference Tour of Ephesus**

**Monday Evening:** 6:00pm, Welcome Reception at Izmir City Center. COMPSAC and SAINT attendees are also welcome to visit the VISION Izmir Workshop on Monday evening at 7pm, held adjacent to the reception.

**Tuesday evening:** 6:30pm, Conference Banquet in Old Smyrna (outdoors). Attendees should have conference banquet tickets for admission, included in your registration packets.

**Wednesday afternoon/evening:** 16:00 – Tour of Ephesus. Bus departs from hotel at 16:00 for a 45 minute trip to the Ephesus ruins. Dinner will be available for purchase at the site.
IEEE COMPSAC International Workshops: Monday July 16

8:30-9:30 Workshop Sessions

SSS 2012: The 5th IEEE International Workshop on Service Science and Systems
METHOD 2012: The 1st IEEE International Workshop on Methods for Establishing Trust with Open Data
MidArch 2012: The 6th IEEE International Workshop on Middleware Architecture in the Internet
Location: Karşıyaka 1 (3rd floor)
  Michiaki Iwazume, National Institute of Information & Communications Technology, Japan

IWSC2012
Invited Talk: TBD
Location: Konak 1 (third floor)

REFS 2012: The 6th IEEE International Workshop on Requirements Engineering for Services
Chair: Colette Rolland
Location: Bergama 3 (3rd floor)
  Keynote: A Business Transaction Framework Based on Problem Diagnosis and Resolution
  Willem-Jan van den Heuvel

The 4th IEEE International Workshop on Software Test Automation (STA 2012)
Chair: TBD
Location: Didim (3rd floor)
  Keynote: TBD

QUORS 2012: The 6th IEEE International Workshop on Quality Oriented Reuse of Software
Session 1: Software Evolution
Chair: Hongji Yang
Location: Bergama 2 (3rd floor)

8:30-8:50 Evaluating Extended Refactoring Guidelines
  Wafa Basit

8:50-9:10 Quantifying Quality of Software Design to Measure the Impact of Refactoring
  Tushar Sharma

9:10-9:30 Mining Association Rules to Facilitate Structural Recovery
  Wu Ren, Wenyun Zhao
10:00-10:30  Morning Break – Smyrna Auditorium (5th floor)
10:30-12:00  Workshop Sessions

SSS 2012: The 5th IEEE International Workshop on Service Science and Systems
Session 1: Service Creation and Evolution
Chair: Xiaodong Liu
Location: Karşıyaka 1 (3rd floor)

10:00-10:30  Automated Web Service Composition using Generic Programming
Liyuan Xiao, Carl K. Chang, Hen-I Yang, Kai-Shin Lu, Hsin-yi Jiang

10:30-11:00  User’s Requirements Driven Services Adaptation and Evolution
Ziyan Xu, Haihong Zhao, Lin Liu

11:00-11:30  An Adaptive Quality Level Selection Method for Efficient QoS-Aware Service Composition
Jae-Hyun Cho, Jang-Ho Choi, Han-Gyu Ko, In-Young Ko

11:30-12:00  A Novel Solution of Distributed File Storage for Cloud Service
Yu Zhang, Weidong Liu, Jiaxing Song

MidArch 2012: The 6th IEEE International Workshop on Middleware Architecture in the Internet
Chair: Atshshi Kanai
Location: Karşıyaka 2 (3rd floor)

10:00-11:00  Invited Talk: Application Architecture Aiming for User-centric Information Discovery and Retrieval
Toru Kobayashi

11:00-11:30  Secure ID Transformation for Robust Pseudonymity against Backflow of Personal Information in SAML Federation
Wataru Oogami, Takaaki Komura, Yasuo Okabe

11:30-12:00  Secure Monitoring for Identity Federations and Distributed Systems
Miguel Macias Enguidanos, Jaime Perez Crespo

METHOD 2012: The 1st IEEE International Workshop on Methods for Establishing Trust with Open Data
Chair: Florian Skopik
Location: Karşıyaka 3 (3rd floor)

10:00-10:15  Welcome Address
Edzard Höfig, Ina Schieferdecker

10:15-10:45  Linked Open Data Aggregation: Conflict Resolution and Aggregate Quality
Tomáš Knap, Jan Michelfeit, Martin Necasky

10:45-11:15 Identification and Utilization of Components for a Linked Open Data Platform
Evanela Lapi, Nikolay Tcholtchev, Louay Bassbouss, Florian Marienfeld, Ina Schieferdecker

11:15-11:45 Sensor Information Fueling Open Data
Miquel Oliver, Manuel Palacin, Albert Domingo, Victor Valls

IWSC 2012: The 9th IEEE International Workshop on Software Cybernetics
Chair: Kai-Yuan Cai
Location: Konak 1 (3rd floor)

Evolution of a Software System across Design and Implementation Stages in Dynamically Changing Environments
Bahtijar Vogel, Arianit Kurti, Marcelo Milrad, Tommi Mikkonen

A Graph Transformation Based Approach for Modeling Component Migration in Mobile Environments
Yu Zhou, Xuefeng Yan, Zhiqiu Huang

Liangdong Wang, Yang Gao, Chun Cao, Li Wang

Learning-Based Multi-Controller Coordination for Self-Optimization
Richang Lin, Bihuan Chen, Yi Xie, Xin Peng, Wenyun Zhao

CFSE 2012: The 4th IEEE International Workshop on Computer Forensics in Software Engineering
Chair: Vinod Polpaya Bhattathiripad
Location: Konak 2 (3rd floor)

Invited Talk: Research and Development of IT Risk Communication Support System and Its Application to Digital Forensic Issues
Ryoichi Sasaki

Cloud Log Forensics Metadata Analysis
Sean Thorpe, Indrajit Ray, Tyrone Grandison, Abbie Barbir

Proposal and Evaluation of the Digital Certificate System with Sumi-coating Module for Privacy Protection
Takashi Sakuma, Ryoichi Sasaki
MVDA 2012: The 1st IEEE International Workshop on Modeling and Verifying Distributed Applications
Session 1: Algorithms and Platforms
Chair: Leila Jemni Ben Ayed
Location: Bergama 1 (3rd floor)

10:00-10:30  A Graphical Language to Integrate Process Algebra and State Machine Views for Specification and Verification of Distributed Real-Time Systems
Jinho On, Sujeong Woo, Moonkun Lee

10:30-11:00  A BPEL4WS Extension to Develop and Execute Grid Service Workflow Application
Yousra Bendaly Hlaoui, Leila Jemni Ben Ayed, Imen Ben Fradj, Ahlem Ben Younes

11:00-11:30  A Distributed and Coordinated Massive DDOS Attack Detection and Response Approach
Mohamed Karim Aroua, Belhassen Zouar

QUORS 2012: The 6th IEEE International Workshop on Quality Oriented Reuse of Software
Session 2: Reuse-Driven Design and Patterns
Chair: Xiaodong Liu
Location: Bergama 2 (3rd floor)

10:00-10:20  Towards Reuse-based Development for the On-Chip Distributed SoC Architecture
Moazzam Fareed Niazi, Tiberiu Seceleanu, Hannu Tenhunen

10:20-10:40  Performance Comparison of Combined Collaborative Filtering Algorithms for Recommender Systems
Dilek Tapucu, Seda Kasap, Fatih Tekbacak

10:40-11:00  Simplifying the Design of Signature Workflow with Patterns
Hwai-Jung Hsu, Ming-Wei Tsai, Feng-Jian Wang

11:00-11:20  A New Cohesion Metric and Restructuring Technique for Object Oriented Paradigm
Mehmet Kaya, James W. Fawcett

REFS 2012: The 6th IEEE International Workshop on Requirements Engineering for Services
Session 2: RE for Services Adaptation and Evolution
Chair: Eric Yu
Location: Bergama 3 (3rd floor)

10:00-10:20  Viewpoints and Issues in Requirements Engineering for Services
Jolita Ralyte

10:20-10:40  A Goal-oriented Perspective on Approaches to Web Service Discovery
Assar Said, Souveyet Carine, Aljoumaa Kadan
11:00-11:20  
*Software Service Evolution: A Requirements Perspective*
Feng-Lin Li, Lin Liu, John Mylopoulos

11:20-11:40  
*Representing Non-Functional Requirements on Services – A Case Study*
Clotilde Rohleder

**SAPSE 2012: The 4th IEEE International Workshop on Security Aspects in Processes and Services Engineering**
Chair: Stelvio Cimato
Location: Petek Boardroom (3rd floor)

10:00-10:30  
*Modeling of A-Posteriori Access Control in Business Processes*
Mohamed Karim Aroua, Belhassen Zouari

10:30-11:00  
*Petri-net-based Modeling and Resolving of Black Hole Attack in WMN*
Hejiao Huang, Qiang Zhou

11:00-11:30  
*Database as a Service: Towards a Unified Solution for Security Requirements*
Mohammad Ali Hadavi, Morteza Noferesti, Rasool Jalili, Ernesto Damiani

**STA 2012: The 4th IEEE International Workshop on Software Test Automation**
Session 2: Agile Software Testing
Chair: TBD
Location: Didim (3rd floor)

10:00-10:45  
Invited Talk: *Asynchronous Software Testing*
Robert Hierons

*Strategies for Agile Software Testing Automation: An Industrial Experience*
Eliane Collins, Arilo Dias-Neto, Vicente Lucena

*Adaptive Agile Performance Modeling and Testing of Embedded Systems*
Marek Stochel, Mariusz Wawrowski

12:00-13:30  
**Lunch** (Note: the conference does not provide lunch. Please visit the registration desk for a list of local restaurants.)

13:30-15:00  
**Workshop Sessions**

**SSS 2012: The 5th IEEE International Workshop on Service Science and Systems**
SSS Session 2: Service Marketing and Management
Chair: Yang Li
**Location: Karşıyaka 1 (3rd floor)**

13:30-14:00  
**GARSS: A Generic Annotation and Recommendation Services System for Digital Repositories**  
Xiaodong Huang, Yong Zhang, Chunxiao Xing

14:00-14:30  
**Material Hub: A Semantic Search Engine with Rule Reasoning**  
Sen Ma, Wen Zhao, Shikun Zhang, Hang Zhang

14:30-15:00  
**Integrated QoS Utility-Based Model for Cloud Computing Service Provider Selection**  
Maria Salama, Ahmed Shawish, Amir Zeid, Mohamed Kouta

---

**MidArch 2012: The 6th IEEE International Workshop on Middleware Architecture in the Internet**  
Chair: Shigeaki Tanimoto  
Location: Karşıyaka 2 (3rd floor)

13:30-14:00  
**Flexible Access Control Framework Considering IdP-side's Authorization Policy in Roaming Environment**  
Toshiki Watanabe, Shunichi Kinoshita, Junichi Yamato, Hideaki Goto, Hideaki Sone

14:00-14:30  
**Implementation and Evaluation of an OpenFlow-based Access Control System for Wireless LAN Roaming**  
Shunichi Kinoshita, Toshiki Watanabe, Junichi Yamato, Hideaki Goto, Hideaki Sone

14:30-15:00  
**A Prototype of Network Failure Avoidance Functionality for SAGE Using OpenFlow**  
Tomoya Furuichi, Susumu Date, Hiroaki Yamanaka, Kohei Ichikawa, Hirotake Abe

---

**METHOD 2012: The 1st IEEE International Workshop on Methods for Establishing Trust with Open Data**  
Chair: Nikolay Tcholtechev  
Location: Karşıyaka 3 (3rd floor)

13:30-14:00  
**Automated Trust Estimation in Developing Open News Stories: Combining Memento & Provenance**  
Erik Mannens, Sam Coppens, Ruben Verborgh, Laurence Hauttekeete, Davy Van Deursen, Rik Van de Walle

14:00-14:30  
**Privacy Preserving Data Publishing for Recommender System**  
Xiaoqiang Chen, Vincent Huang

---

**IWSC 2012: The 9th IEEE International Workshop on Software Cybernetics**  
Chair: Xianping Tao  
Location: Konak 1 (3rd floor)
Distribution-aware Mutation Analysis
Chang-ai Sun, Guan Wang, Kai-Yuan Cai, Tsong Yueh Chen

A Reputation System for Trustworthy QoS Information in Service-Based Systems
Jun Lin, Changhai Jiang, Hai Hu, Kai-Yuan Cai, Stephen Yau, Dazhi Huang

Program Behavior Analysis and Control for Online IDE
Ling Wu, Guangtai Liang, Qianxiang Wang

CFSE 2012: The 4th IEEE International Workshop on Computer Forensics in Software Engineering
Chair: Sean Thorpe
Location: Konak 2

A Proposal for Incorporating Programming Blunder as Important Evidence in Abstraction-Filtration-Comparison Test
Vinod Polpaya Bhattathiripad

Development of InfoVis Software for Digital Forensics
Grant Osborne, Benjamin Turnbull, Jill Slay

MVDA 2012: The 1st IEEE International Workshop on Modeling and Verifying Distributed Applications
Session 2: Emerging Techniques
Chair: Yousra Bendaly Hlaoui
Location: Bergama 1 (3rd floor)

13:30-14:00 UML AD Refinement Patterns for Modeling Workflow Applications
Ahlem Ben Younes, Leila Jemni Ben Ayed, Yousra Bendaly Hlaoui

14:00-14:30 An Efficient IPTV Distribution Technique under NAT Environment
Ming-Huang Chen, Yaw-Chung Chen, Wen-Kang Jia

QUORS 2012: The 6th IEEE International Workshop on Quality Oriented Reuse of Software
Chair: TBA
Location: Bergama 2 (3rd floor)

13:30-14:00 Performance Analysis of Reusable Components with Hybrid Modeling of Strategies and Processes
Sheau Ling Tan, Lin Liu

14:00-14:30 Translation Rules and a Supporting Tool for Model-based Reuse
Junfeng Zhao, Jiantao Zhou
14:30-15:00  Parallel Software Reuse Driven CPN Model Reduction and Analysis Approach  
Tao Sun, Xinming Ye, Hongji Yang, Jing Liu

REFS 2012: The 6th IEEE International Workshop on Requirements Engineering for Services  
Session 3: RE for Non-functional Requirements  
Chair: Lin Liu  
Location: Bergama 3 (3rd floor)

Takao Okubo, Haruhiko Kaiya, Nobukazu Yoshioka

13:50-14:10  Automated Reasoning with Goal Tree Models for Software Quality Requirements  
Bo Wei, Zhi Jin, Didar Zowghi, Bin Yin

14:10-14:30  Improving Quality Software Requirements Specifications using Spectrum Analysis  
Haruhiko Kaiya, Atsushi Ohnishi

14:30-14:50  The Concepts and Ontology of SiSL: A Situation-Centric Specification Language  
Haihua Xie, Carl K. Chang, Hua Ming, Kai-shin Lu

Jianchu Huang, Hongji Yang

SAPSE 2012: The 4th IEEE International Workshop on Security Aspects in Processes and Services  
Engineering  
Chair: Stelvio Cimato  
Location: Petek Boardroom (3rd floor)

13:30-14:00  Deriving Process-Related RBAC Models from Process Execution Histories  
Anne Baumgrass, Sigrid Schefer-Wenzl, Mark Strembeck

14:00-14:30  Approximation Algorithms for Minimizing the Number of Roles and Administrative Assignments in RBAC  
Hejiao Huang, Feng Shang, Jiangtao Zhang

14:30-15:00  Robust XML Watermarking Using Fuzzy Queries  
Romaric-Ange Tchokpon, Nadia Bennani, Ernesto Damiani

STA 2012: The 4th IEEE International Workshop on Software Test Automation  
Session 3: Testing Mobile and Open Software  
Chair: TBD  
Location: Didim (3rd floor)
Model-based Conformance Testing of WS-BPEL Compositions
Afef Imal Maâlej, Moez Krichen, Mohamed Jmaiel

A Conceptual Framework for Open Source Software Test Process
Tamer Abdou, Peter Grogono, Pankaj Kamthan

15:00-15:30 Afternoon Break – Smyrna Auditorium (5th floor)
15:30-17:00 Workshop Sessions

SSS 2012: The 5th IEEE International Workshop on Service Science and Systems
Session 3: Service Paradigms in Industry
Chair: Lin Liu
Location: Karşıyaka 1 (3rd floor)

15:30-16:00 Service Level Management for Service Value Networks
Frank Schulz, Wibke Michalk, Markus Hedwig, Marcus McCallister, Christof Momm, Simon Caton, Christian Haas, Daniel Rolli, Monika Tavas

16:00-16:20 General Talk: Towards Cross-Domain Situation-Based Context Management and Highly Adaptive Pervasive Services
Xiaodong Liu

16:20-16:40 General Talk: Agent-Based Simulation and Its Applications to Service Management
Yang Li

MidArch 2012: The 6th IEEE International Workshop on Middleware Architecture in the Internet
Chair: Toru Kobayashi
Location: Karşıyaka 2 (3rd floor)

15:30-16:00 Group Management System for Federated Identities with Flow Control of Membership Information by Subjects
Takeshi Nishimura, Motonori Nakamura, Makoto Otani, Kazutsuna Yamaji, Noboru Sonehara

16:00-16:30 Analysis of Security of PKI Operation with Multiple CP/CPS Based on Level of Assurance
Shigeaki Tanimoto, Shinichi Mizuhara, Msasahiko Yokoi, Hiroyuki Sato, Atsushi Kanai

METHOD 2012: The 1st IEEE International Workshop on Methods for Establishing Trust with Open Data
Chair: Edzard Höfig
Location: Karşıyaka 3 (3rd floor)

15:30-16:00 Attack Vectors to Metering Data in Smart Grids under Security Constraints
Florian Skopik, Zhendong Ma
16:00-16:30  

*Protecting Resources in an Open and Trusted Peer-to-peer Network*

Jean-Francois Lalande, David Rodriguez

16:30-16:45  

Closing Remarks

Edzard Höfig, Ina Schieferdecker

---

**IWSC 2012: The 9th IEEE International Workshop on Software Cybernetics**
**Chair: Steven Yau**
**Location: Konak 1 (3rd floor)**

*_Safe Regression Test Selection Based on Program Dependence Graphs*_

Jianchun Xing, Hongda Wang, Wei Song, Qiliang Yang

_panel:_ *Future Directions of Software Cybernetics*  
Panellists: Kai-Yuan Cai, Xianping Tao, Qianxiang Wang

---

**MVDA 2012: The 1st IEEE International Workshop on Modeling and Verifying Distributed Applications**
**Session 3: Formal Approaches**
**Chairs: Ahlem Ben Younes**
**Location: Bergama 1 (3rd floor)**

15:30-16:00  

Automatic Generation of an Operational CSP-Z Specification from an Abstract TemporalZ Specification

Thouraya Guoismi, Amira Regayeg, Ahmed Hadj Kacem

16:00-16:30  

A Semantics-Based Privacy-Aware Approach for Fragmenting Business Processes

Mohamed-Anis Zemni, Nejib Ben-Hadj Alouane, Mohamed Moez Yeddes

---

**QUORS 2012: The 6th IEEE International Workshop on Quality Oriented Reuse of Software**
**Session 4: Cloud Computing Services and QoS**
**Chair: Lin Liu**
**Location: Bergama 2 (3rd floor)**

15:30-16:00  

*A QoS Assurance Middleware Model for Enterprise Cloud Computing*

Shou-Yu Lee, Dongyang Tang, Tingchao Chen, William Cheng-Chung Chu

16:00-16:30  

*Towards OWL 2 Natively Supported Fuzzy Cloud Ontology*

Daren Fang, Xiaodong Liu, Imed Romdhani, Huiqun Zhao

16:30-17:00  

*SE-EQUAM – An Evolvable Quality Metamodel*

Aseel Hmood, Iman Keivanloo, Juergen Rilling
REFS 2012: The 6th IEEE International Workshop on Requirements Engineering for Services  
Location: Bergama 3 (3rd floor)

Panel: Requirements Engineering for Services Evolution  
Mediator: Lin Liu  
Panelists: Colette Rolland, Eric Yu, Jolita Ralyté, Zhi Jin, Willem-Jan van den Heuvel

STA 2012: The 4th IEEE International Workshop on Software Test Automation  
Session 4: Testing Large Systems  
Chair: TBD  
Location: Didim (3rd floor)

Invited Talk 2 (45 min)  
Ina Schieferdecker

Mining Data Chain Graph for Fault Localization  
Bo Yang, Ji Wu, Chao Liu

Effects of Class Imbalance in Test Suites: An Empirical Study of Spectrum-Based Fault Localization  
Gong Cheng, Zheng Zheng, Li Wei, Hao Peng

Tuesday July 17: Main Conference

8:30-9:00 Joint Opening Session – Grand Efes Ballroom (1st floor)  
Conference Welcome: Elisa Bertino and Fevzi Belli  
Opening Remarks: John Walz, President, IEEE Computer Society  
Kazuo Furukawa, President, Information Processing Society of Japan  
COMPSAC Program Overview/Best Paper Awards  
Xiaoying Bai, Atilla Elci and Mohammad Zulkernine  
SAINT Program Overview/Best Paper Awards  
Sumi Helal, Kazutoshi Fujikawa, Ying Cai,

9:00-10:00 Joint COMPSAC/SAINT Keynote  
George O. Strawn, Director, National Coordination Office/NITRD, OSTP, USA  
Session Chair: Carl K. Chang

10:00-10:30 Morning Break – Smyrna Auditorium (5th floor)  
10:30-12:00 Parallel Sessions

Software Life Cycle, Evolution and Maintenance I  
Chair: Hong Zhu, Oxford Brookes University, UK
Location: Konak 1/2 (3rd floor)

Effective Statistical Fault Localization Using Program Slices
Yan Lei, Xiaoguang Mao, Ziying Dai, Chengsong Wang

Recovering Traceability Links between Code and Documentation for Enterprise Project Artifacts
Shouichi Nagano, Yusuke Ichikawa, Toru Kobayashi

A Source Code Recommender System to Support Newcomers
Yuri Malheiros, Alan Moraes, Cleyton Trindade, Silvio Meira

Reliability, Metrics and Fault Tolerance I
Chair: Kai-Yuan Cai, Beijing University of Aeronautics and Astronautics, China
Location: Bergama 1 (3rd floor)

Workload-Aware Online Anomaly Detection in Enterprise Applications with Local Outlier Factor
Tao Wang, Wenbo Zhang, Jun Wei, Hua Zhong

A Metrics-Based Data Mining Approach for Software Clone Detection
Salwa Abd-El-Hafiz

A Petri Nets-based Byzantine Fault Diagnosis Method for Service Composition
Guisheng Fan, Huiqun Yu, Liqiong Chen, Dongmei Liu

Software Testing I
Chair: Rajesh Subramanyan, Siemens Corporate Research, USA
Location: Bergama 2/3 (3rd floor)

Adaptive Random Test Case Generation for Combinatorial Testing
Rubing Huang, Xiaodong Xie, Tsong Yueh Chen, Yansheng Lu

Capacity Evaluation of Multi-Modal Network Notification Service
J. Jenny Li, Colin L. Mallows, Jim Landwehr

Preemptive Regression Test Scheduling Strategies: A New Testing Approach to Thriving on the Volatile Service Environments
Lijun Mei, Ke Zhai, Bo Jiang, W.K. Chan, T.H. Tse

Panel 1: Trustworthiness of Open Source, Open Data, Open Systems and Open Standards
Location: Didim (3rd floor)

Chair: Ina Schieferdecker, Fraunhofer FOKUS, Germany
Panelists:
Estve Almirall – ESADE, Spain
Minghui Zhou – Peking University, China
Edzard Höfig – Free University Berlin, Germany
12:00-13:00 Lunch
(Note: the conference does not provide lunch. Please visit the registration desk for a list of local restaurants.)

13:30-15:00 Parallel Sessions

Software Life Cycle, Evolution and Maintenance 2
Chair: Xianping Tao
Location: Konak I (3rd floor)

Integrating Software Product Lines: A Study of Reuse vs. Stability
Alessandro Gurgel, Francisco Dantas, Alessandro Garcia, Claudio Sant'Anna

Experiences of a Product Line Migration Project
Detlef Streitferdt, Arfan Mansoor

Kutulu: A Domain-specific Language for Feature-driven Product Derivation
Orçun Dayibaş, Halit Oğuztüzün

Automatic Adaptation of Software Applications to Database Evolution by Graph Differencing and AOP-based Dynamic Patching
Yang Song, Xin Peng, Zhenchang Xing, Wenyun Zhao

Reliability, Metrics and Fault Tolerance 2
Chair: Ahmet Koltuksuz, Yasar University, Turkey
Location: Bergama I (3rd floor)

An Effective Defect Detection and Warning Prioritization Approach for Resource Leaks
Guangtai Liang, Qian Wu, Qianxiang Wang, Hong Mei

Evaluating Reliability-Testing Usage Models
Bo Wan, Gregor v Bochmann, Guy-Vincent Jourdan

Towards Online Localization and Recovery for Faulty Components in Component-Based Applications
Chao You, Minghui Zhou, Hongwu Lin, Zan Xiao, Hong Mei

Software Testing 2
Chair: Bengi Karacali, Avaya Labs, USA
Location: Bergama I (3rd floor)

CATest: A Test Automation Framework for Multi-Agent Systems
Shufeng Wang, Hong Zhu

Usefulness Evaluation of Simulation in Server System Testing
Jian Sun, Tomi Männistö

Towards Dynamic Random Testing for Web Services
Chang-Ai Su, Guan Wang, Kai-Yuan Cai, Tsong Yueh Chen

How to Recommend Appropriate Developers for Bug Fixing
Tao Zhang, Byungjeong Lee

Software Architecture and Design I
Chair: Wenbo Zhang, Chinese Academy of Sciences, China
Location: Didim (3rd floor)

Adaptive Explanation Architecture for Maintaining Human-Computer Trust
Florian Nothdurft, Gregor Bertrand, Helmut Lang, Wolfgang Minker

Quality-Driven Self-Adaptation: Bridging the Gap between Requirements and Runtime Architecture by Design Decision
Liwei Shen, Xin Peng, Wenyun Zhao

A Rapid Development Framework for Multilingual Spoken Dialogue Systems
Masahiro Araki, Daisuke Takegoshi

15:00-15:30 Afternoon Break – Smyrna Auditorium (5th floor)
15:30-17:00 Parallel Sessions

Software Life Cycle, Evolution and Maintenance 2I
Chair: Xiadong Liu, Edinburgh Napier University, UK
Location: Konak I/2 (3rd floor)

ALTA: Automatic Load-time Adaption Technique for Refactoring-based Evolution of Software Component
Kai-Shin Lu, Carl K. Chang

An Initial Study on Refactoring Tactics
Hui Liu, Yuan Gao, Zhendong Niu

A Framework for Examining Topical Locality in Object-oriented Software
Nan Niu, Juha Savolainen, Tanmay Bhowmik, Anas Mahmoud, Sandeep Reddivari

Domain Independent Event Analysis for Log Data Reduction
Theodoros Kalamatianos, Kostas Kontogiannis, Peter Matthews

Security
Chair: Murat Kantarcioglu, University of Texas at Dallas, USA
Location: Bergama I (3rd floor)

_Preventing Input Validation Vulnerabilities in Web Applications through Automated Type Analysis_
Theodoor Scholte, William Robertson, Davide Balzarotti, Engin Kirda

_Real-time Fast-flux Identification via Localized Spatial Geolocation Detection_
Horng-Tzer Wang, Kuo-Ping Wu, Ching-Hao Mao, Hahn-Ming Lee

Panel 2: Software Testing, Software Quality and Trust in Software-Based Systems
Location: Didim (3rd floor)

Chair: Christof Budnik, Siemens, US
Panelists:
- Tory Kobayashi, NTT, Japan
- Robert Hierons, Brunel University, UK
- Rajesh Subramanyan, Siemens Corporate Research, USA

Software Architecture and Design 2
Chair: Fengjian Wang, National Chiao-Tung University, Taiwan
Location: Bergama 2/3 (3rd floor)

_An Approach for Detecting Inconsistencies between Behavioral Models of the Software Architecture and the Code_
Selim Ciraci, Hasan Sozer, Bedir Tekinerdogan

_FINE-grained Design Pattern Detection_
Maurice Lebon, Vassilios Tzerpos

_On the Proactive Design of Aspect-Oriented Product-Line Architectures: An Exploratory Study_
Willian Oizumi, Antonio Contieri Junior, Guilherme Correia, Thelma Colanzi, Sandra Ferrari, Itana Gimenes, Edson Oliveira Junior, Alessandro Garcia, Paulo Cesar Masiero

Evening: COMPSAC/SAINT Conference Banquet (at Old Smyrna)

**Wednesday July 18, 2012: Main Conference**

**8:30-10:00** Joint Keynote Address
Ross Anderson, Professor, Cambridge, UK
Chair: Elisa Bertino

**10:00-10:30** Morning Break: Smyrna Auditorium (5th floor)
Also: Poster session in Smyrna Auditorium will run 10:00-13:30

**10:30-12:00** Parallel Sessions
Requirements Engineering  
Chair: Lin Liu, Tsinghua University, China  
Location: Konak I/2 (3rd floor)  

*Development of Situational Requirements Engineering Processes: A Process Factory Approach*
Omid Jafarinezhad, Raman Ramsin  

*Software Product Line Engineering for Developing Self-adaptive Systems: Towards the Domain Requirements*
Liwei Shen, Xin Peng, Wenyun Zhao  

*Requirements Understanding: A Challenge in Global Software Development, Industrial Surveys in Kingdom of Saudi Arabia*
Mohammed A. Alnuem, Arshad Ahmad, Hashim Khan  

Panel 3: Creative Computing: Reconciling Objective Precision with Subjective Ambiguity  
Location: Bergama I (3rd floor)  
Chair: Hongji Yang, De Montfort University, UK  
Panelists:  
Ruqian Lu - Academy of Mathematics and Systems Science, China  
*Animated Computing Changes the Way and Style of Computer Application*  
Andrew Hugill - De Montfort University, UK  
*Challenges for Creative Computing*  
Songmao Zhang - Chinese Academy of Sciences, China  
*Using the Semantic Web Technologies to Support Automatic Animation*  
Hong Zhu - Oxford Brooks University, UK  
*Can Software Design Benefit from Creative Computing?*  

Formal Methods  
Chair: Dianxiang Xu, Dakota State University, USA  
Location:Bergama 2/3 (3rd floor)  

*XMLSnippet: A Coding Assistant for XML Configuration Snippet Recommendation*
Sheng Huang, Yanghua Xiao, Yiqi Lu, Wei Wang, Yu Wang  

*Model-based Static Source Code Analysis of Java Programs with Applications to Android Security*
Zheng Lu, Supratik Mukhopadhya
A Change Proposal Driven Approach for Changeability Assessment Using FCA-based Impact Analysis
Xiaobing Sun, Bixin Li, Qiandong Zhang

A Methodology for Building Effective Test Models with Function Nets
Dianxiang Xu, William Chu

Fast Abstract
Note time: 10:15-12:30
Chair: Hiroyuki Sato, Tokyo University, Japan
Location: Didim (3rd floor)

Paxos-Based Memory Data Replication in Stock Trading System
Xiaodong Huang, Yong Zhang, Chunxiao Xing, Yinfei Huang, Jianfeng Wu, Shuo Bai

Using Program Dynamic Analysis for Weak Algorithm Detection
Zakarya Alzamil

Requirement Patterns for Multicore Systems
Arfan Mansoor, Detlef Streitferdt

Performance Evaluations of Vector-raster Satellite Image Transfers through Web Services
Süleyman Eken, Ahmet Sayar

User Profiling for Policy Management in Social Communities
Okan Bursa, Özgü Can, Murat Osman Unalir

On Capturing Effects of Modifications as Data Dependencies
Hasan Ural, Husnu Yenigun

Accelerated Deterministic Multithreading for Multichannel Video Decoder
Youngsam Shin, Minyoung Son, Seungwong Lee, Shihwa Lee

Image Analysis Using Machine Learning: Anatomical Landmarks Detection in Fetal Ultrasound Images
Bahbibi Rahmatullah, Aris T. Papageorghiou, J. Alison Noble

Test Case Generation by Simulating Requirements Analysis Model
Ryo Shikimi, Shinpei Ogata, Saeko Matsuura

Customer Churn Prediction for Telecom Services
Utku Yabas, Hakki Candan Cankaya, Turker Ince

A Cluster-Based Core Protection Technique for Networks-on-Chip
Khalid Latif, Amir-Mohammad Rahmani, Pasi Liljeberg, Hannu Tenhunen, Tiberiu Secleanu
**HCI Knowledge in Software Engineering Practices for Designing Interactive Maintenance Assistance Systems**
Samir Benbelkacem, N. Zenati-Henda, M. Belhocine, A. Bellarbi, M. Tadjine

**An Intermediate Language for Semantic Exceptions in Context-Aware Systems**
Eun-Sun Cho, Sumi Helal

**Doppel-Code: A Clone Visualization Tool for Prioritizing Global and Local Clone Impacts**
Juergen Rilling

**Poster Session (10:00-13:30)**
**Chair:** Tolga Ayav, Izmir Institute of Technology, Turkey  
**Location:** Smyrna Auditorium

- **WorldTour**: Towards an Adaptive Software to Support Children with Autism in Tour Planning  
Felipe Rodrigues Monteiro Sousa, Thais Helena Chaves de Castro

- **Implementation and Evaluation of Commodity Hardware and Software in an Open World Spoken Dialog Framework**  
Hareendra Manuru, Rajagopal Vasudevan, Ashok Sasidharan, Thomas Lynch, Seth Darbyshire, Sayajeet Raje, Rajiv Ramnath, Jayashree Ramanathan

- **Conformance Testing of WS-BPEL Compositions Under Various Load Conditions**  
Afef Jmal Maâlej, Moez Krichen, Mohamed Jmaiel

- **Research on requirements engineering for avionics (only poster presentation)**  
Göran Bertheau

**12:00-13:30 Break for Lunch**  
(Note: the conference does not provide lunch. Please visit the registration desk for a list of local restaurants.)

**13:30-150:** COMPSAC/SAINT Joint Panel on Social Computing  
**Chair:** Amr Elkadi and Salwa Abd-El-Hafiz  
**Proposed by:** Michiharu Takemoto  
**Location:** Grand Efes Ballroom

**15:00-20:30:** COMPSAC/SAINT Group Outing to Ephesus

---

**Thursday July 19, 2012: Main Conference**

**8:30-10:00** Grand Efes Ballroom: Joint COMPSAC/SAINT Panel: Challenges Toward the Global Adoption of Cloud Computing  
**Chair:** Vladimir Getov, University of Westminster, UK  
**Panelists:**  
C.C. William Chu, Tunghai University, Taiwan
William Claycomb, Carnegie Mellon University, USA
George Strawn, Director of the National Coordination Office (NCO), USA
Stephen Yau, Arizona State University, USA

10:00-10:30  Morning Break: Smyrna Auditorium (5th floor)

10:30-12:00  Parallel Sessions

Cloud Computing I
Chair: William R. Claycomb, Carnegie Mellon University, USA
Location: Konak I/2 (3rd floor)

PaaS-Oriented Performance Modeling for Cloud Computing
Wenbo Zhang, Xiang Huang, Ningjiang Chen, Wei Wang, Hua Zhong

Event Indexing and Searching for High Volumes of Event Streams in the Cloud
Miao Wang, Viliam Holub, John Murphy, Patrick O’Sullivan

Demystifying Cloud Benchmarking Paradigm: An In-depth View
Venugopalan Vedam, Jayanti Vemulapati

Web-Based System
Chair: Weider Yu, San Jose State University, USA
Location: Bergama I (3rd floor)

An Evaluation Model for Dependability of Internet-scale Software on Basis of Bayesian Networks
Guannan Si, Jufeng Yang, Jing Xu, Shuo Wen, Wei Tian

Deriving Specifications for Composite Web Services
George Baryannis, Manuel Carro, Dimitris Plexousakis

Application I
Chair: Ying Cai, Iowa State University, USA
Location: Bergama 2/2l (3rd floor)

Americans With Disabilities Act - Compliance Assessment Toolkit on Smartphone
Mohammad Tanviruzzaman, Rizwana Rizia, Sheikh Iqbal Ahamed, Roger Smith

Automatic Data Clustering Analysis of Arbitrary Shape with K-means and Enhanced Ant-based Template Mechanism
Wei Zhang, Hen-I Yang, Hsin-yi Jiang, Carl K. Chang

Applying Knowledge Elicitation to Improve Web Effort Estimation: A Case Study
Emilia Mendes, Manar AbuTalib, Steve Counsell
Industry Track
Chair: M. Erdal Balaban, Isik University, Turkey
Location: TBD

Architecturing Business Intelligence for SMEs
Ayşe Eser Baransel, Cesur Baransel

Agile Adoption Story from NHN
Eunha Kim, Seokmoon Ryoo

Educational Activity Finder for Children with Pervasive Developmental Disorder through a Semantic Search System
Duygu Çelik, Atilla Elçi, Eray Elverici, Necatı İnan

A Scalable Physical Memory Allocation Scheme for L4 Microkernel
Chen Tian, Daniel Waddington, Jilong Kuang

Model Driven Software Development for Military Command and Control Systems
Burak Çiflikli, Onur Özcan, Ahmet Bora Uysal

Panel 4: Cross-sectoral Challenging Objectives for Achieving Trustworthy Software
Location: Didim (3rd floor)
Chair: Baris Sarialioglu, Yapi Kredi Bank, Turkey
Panelists:
Ahmet Duran - Huawei Technologies, Turkey
Murat Lostar - ISACA, Turkey
Koray Yitmen - Turkish Testing Board, Turkey
Dr. Masood Mortazavi - Yahoo, USA

12:00-13:00 Break for Lunch
(Note: the conference does not provide lunch. Please visit the registration desk for a list of local restaurants.)
13:00-15:00 Parallel Sessions

Cloud Computing Tutorial
With William R. Claycolmb, Carnegie Mellon University, USA
Location: Smyrna Auditorium 1 (5th floor)

Cloud Computing 2
Chair: William Chu, Tunghai University, Taiwan
Location: Konak I (3rd floor)

CASViD: Application Level Monitoring for SLA Violation Detection in Clouds
Vincent C. Emekaroha, Tiago C. Ferreto, Marco A. S. Netto, Ivona Brandic, Cesar A. F. De Rose
**P-Tracer: Path-based Performance Profiling in Cloud Computing Systems**  
Haibo Mi, Huaimin Wang, Hua Cai, Yangfan Zhou, Michael Lyu, Zhenbang Chen

**A Solution For Privacy Protection In MapReduce**  
Quang Tran, Hiroyuki Sato

---

**Smart and Semantic Computing**  
**Chair: Juergen Rilling, Concordia University, Canada**  
**Location: Bergama I (3rd floor)**

*Using Semantic Web Technologies for RBAC in Project Oriented Environments*  
Satyajeet Raje, Chowdary Davuluri, Micheal Freitas, Rajiv Ramnath, Jay Ramanathan

*The RDFa Content Editor -- From WYSIWYG to WYSIWYM*  
Ali Khalili, Sören Auer

*Semantic Web – The Missing Link in Global Source Code Analysis?*  
Iman Keivanloo, Juergen Rilling, Philippe Charland

*Enriching the DBpedia Ontology with Shared Conceptualizations from Folksonomies*  
Sana Hamdi, Alda Gancarski, Amel Bouzeghoub, Sadok Ben Yahia

---

**Application 2**  
**Chair: Sheikh Iqbal Ahamed, Marquette University, USA**  
**Location: Bergama 2/3 (3rd floor)**

*Novel Energy Saving Opportunities in Smart Grids using a Secure Social Networking Layer*  
Florian Skopik, Christian Wagner

*Privacy-Preserving Data Publishing for Free Text Chinese Electronic Medical Records*  
Lei Chen, Ji-Jiang Yang, Qing Wang

*Disease-disease relationships for rheumatic diseases*  
Andreas Holzinger, Klaus-Martin Simonic, Pinar Yildirim

*A privacy-preserving cloud computing system for creating participatory noise maps*  
George Drosatos, Pavlos S. Efraimidis, Ioannis N. Athanasiadis, Ellie D’Hondt, Matthias Stevens

---

**HCI and Usability**  
**Chair: Masahiro Araki, Kyoto Institute of Technology, Japan**  
**Location: Didim (3rd floor)**

*Influence of Anchor Management on Anchored Navigation in Mobile Maps*  
Rodrigo Maués, Eduardo Nakamura, Simone D.J. Barbosa
Study of Fractal Color Image Compression using YUV components
Eman Al-Hilo, Loay Goerge

STREAM-ADD: Supporting the Documentation of Architectural Design Decisions in an Architecture Derivation Process
Diego Dermeval, João Pimentel, Carla Silva, Jaelson Castro, Emanuel Santos, Gabriela Guedes, Márcia Lucena, Anthony Finkelstein

15:00-15:30 Afternoon Break: Smyrna Auditorium

15:30-17:00 Parallel Sessions

Panel 5: Cloud Computing for Developing Countries
Location: Didim (3rd floor)
Chair: Tugkan Tuglular, Turkey
Panelists:
Tugkan Tuglular, Izmir Institute of Technology, Turkey
Rajesh Subramanjan – Siemens Corporate Research, US
Kivanc Uslu – IBM Turkey, Turkey
Yong Zhang, Tsinghua University, China

Mobile & Pervasive Computing
Chair: Sumi Helal, Univ of Florida, USA
Location: Bergama I (3rd floor)

Simulating Power Consumption of Location Tracking Algorithms to Improve Energy-efficiency of Smartphones
Ulrich Bareth

KnockAround: Location Based Service via Social Knowledge
Rizwana Rizia, Mohammad Tanviruzzaman, Sheikh Iqbal Ahamed

ConsView: Towards Application-specific Consistent Context Views
Haibin Yang, Chang Xu, Xiaoxing Ma, Linghao Zhang, Chun Cao, Jian Lu

Application 2
Chair: W.K. Chan, City University of Hongkong, Hong Kong
Location: Bergama 2/2I (3rd floor)

An Agent-based Application to Enable Deregulated Energy Markets
Nicola Capodieci, Andrea Pagani, Giacomo Cabri, Marco Aiello

Teaching Software Engineering in Developing Countries: A Position Paper
Rasha Osman
Leveraging 24/7 Availability and Performance for Distributed Real-time Data Warehouses
Ricardo Jorge Santos, Jorge Bernardino, Marco Vieira

Real-Time and Embedded System
Chair: Tiberiu Seceleanu, ABB Corporate Research, Sweden
Co-chair: Khalid Latif, University of Turku, Finland
Location: Konak I (3rd floor)

Specification Mutation Analysis for Validating Timed Testing Approaches Based on Timed Automata
Mohammad Aboutrab, Steve Counsell, Robert Hierons

Automatic RT-Java code generation from AADL models for ARINC653-based avionics software
Ying Wang, Dianfu Ma, Yongwang Zhao, Lu Zou, Xianqi Zhao

Scheduling and analysis of real-time software families
Hamideh Sabouri, Mohammad Mahdi Jaghoori, Frank de boer, Ramtin Khosravi

Workshop Sessions: Friday July 20

IEESD 2012: The 4th IEEE International Workshop on Industrial Experience in Embedded Systems Design
TIP 2012: The 1st IEEE International Workshop on Tools in Embedded Systems Design Process
Chair: Detlef Streitferdt
Location: Konak 1 (3rd floor)

10:00-10:30 Load Balancing for Cross Layer Communication
John F. Schommer, Dominik Franke, Tim Lange, Stefan Kowalewski

10:30-11:00 Development of a Mobile Platform to Support Building Maintenance Engineering
Paul Stack

11:00-11:30 An Estimation Model for the Savings Achievable by Tool Chains
Matthias Biehl, Martin Törngren

CORCS 2012: The 4th IEEE International Workshop on Component-Based Design of Resource-Constrained Systems
Chair: Tiziana Margaria
Location: Konak 2

10:00-10:30 Performance Awareness in Component Systems: Vision Paper
Lubomir Bulej, Tomas Bures, Vojtech Horky, Jaroslav Keznikl, Petr Tuma
10:30-11:00  
*Understanding the Role of Transmission Power in Component-Based Architectures for Adaptive WSN*
Guillermo Rodriguez-Navas, Miquel A. Ribot, Bartomeu Alorda

11:00-11:30  
*Tool-supported Methodology for Component-based Design of Wireless Sensor Network Applications*
Steffen Peter, Peter Langendoerfer

---

**STPSA 2012: The 7th IEEE International Workshop on Security, Trust, and Privacy for Software Applications**
Chair: Lorenzo Martino
Location: Bergama 1 (3rd floor)

*Branch Obfuscation using Code Mobility and Signals*
Zhi Wang, Chunfu Jia, Min Liu, Xiaoxu Yu

*Detection of Buffer Overflow Vulnerabilities in C/C++ with Pattern based Limited Symbolic Evaluation*
Sun Ding, Hee Beng Kuan Tan, Kaiping Liu, Hong Yu Zhang, Chandramohan Mahinthan

*Towards a Secure Software Development Lifecycle with SQUARE+R*
Weider Yu, Kyle Le

---

**ESAS 2012: The 7th IEEE International Workshop on Engineering Semantic Agent Systems**
Chair: TBD
Location: Bergama 2 (3rd floor)

*Conditional Ontology Mapping*
Islam Elgedawy

*Integration of 3D Trajectory Maps into a Local Distribution Map of Radiation Dose Using Unmanned Aerial Vehicle*
Katsunori Oyama, Hiroyuki Wakabayashi, Atsushi Takeuchi, Naoki Ishitsuka

*A Load Balancing Scheme for Distributed Simulation based on Multi-Agent System*
Young Joon Lee, Geon Yong Park, Ho Kuen Song, Hee Yong Youn

*The Semantics of the Interaction between Agents and Web Services on the Semantic Web*
Sinem Getir, Moharram Challenger, Sebla Demirkol, Geylani Kardas

---

12:00-13:30 Lunch  (Note: the conference does not provide lunch. Please visit the registration desk for a list of local restaurants.)

13:30-15:00  Workshop Sessions
IEESD 2012: The 4th IEEE International Workshop on Industrial Experience in Embedded Systems Design
TIP 2012: The 1st IEEE International Workshop on Tools in Embedded Systems Design Process
Chair: Tiberiu Seceleanu
Location: Konak 1 (3rd floor)

13:30-14:00  GcLite: An Expert Tool for Analyzing Garbage Collection Behavior
Vasileios Angelopoulos, Trevor Parsons, John Murphy, Patrick O’Sullivan

14:00-14:30  Integration and Analysis of Design Artefacts in Embedded Software Development
Daniel Merschen, Julian Pott, Stefan Kowalewski

14:30-15:00  Product Line Variability Model Construction based on Model Difference
Kunming Nie

CORCS 2012: The 4th IEEE International Workshop on Component-Based Design of Resource-Constrained Systems
Chair: Tiziana Margaria
Location: Konak 2 (3rd floor)

13:30-14:00  Extending EAST-ADL for Modeling and Analysis of System’s Resource-Usage
Raluca Marinescu, Eduard Paul Enoiu

14:00-14:30  Modelling the design for an SOA System to Control a Small Scale Energy Zone
Maria Anjum, David Budgen

14:30-15:00  Rule Based Axiomatic Design Theory Guidance for Software Development
Cengiz Togay, Emre Selman Caniaz, Ali Hikmet Dogru

STPSA 2012: The 7th IEEE International Workshop on Security, Trust, and Privacy for Software Applications
Chair: Chunfu Jia
Location: Bergama 1 (3rd floor)

Internet-Based Evaluation and Prediction of Web Services Trustworthiness
Meng Li, Zhebang Hua, Junfeng Zhao, Bing Xie

On Security Analysis of PHP Web Applications
David Hauzar, Jan Kofroň

Measuring the Adequacy of Software Security Requirements Engineering
Nancy Mead

27
ESAS 2012: The 7th IEEE International Workshop on Engineering Semantic Agent Systems
Chair: TBD
Location: Bergama 2 (3rd floor)

*Integrating Linked Data Space with Agents Using the Environment Abstraction*
Rıza Cenk Erdur, Oğuz Dikenelli, Oylum Alatlı, Erdem Eser Ekinci, Ziya Akar

*An Image Processing Approach to Solve Labyrinth Discovery Robotics Problem*
Behnam Rahnama, Atilla Elçi, Shadi Metani

*Development of Semantic Model and Information Exploration System for TV Media*
Duygu Celik, Atilla Elçi, Esra Calik, Ayman Ahmad Khalil

15:00-15:30  Afternoon Break

STPSA 2012: The 7th IEEE International Workshop on Security, Trust, and Privacy for Software Applications
Chair: Kaiping Liu
Location: Bergama 1 (3rd floor)

*Attack model based penetration test for SQL injection vulnerability*
Wei Tian, Ju-Feng Yang, Jing Xu, Guan-Nan Si

*An Efficient Graph Codec System for Software Watermarking*
Maria Chroni, Stavros Nikolopoulos

*A Certificate Based Context Aware Access Control Model for Smart Mobile Devices in Ubiquitous Computing Environments*
Davut Cavdar, Ahmet Yortanli, Pekin Erhan Eren, Altan Kocyigit