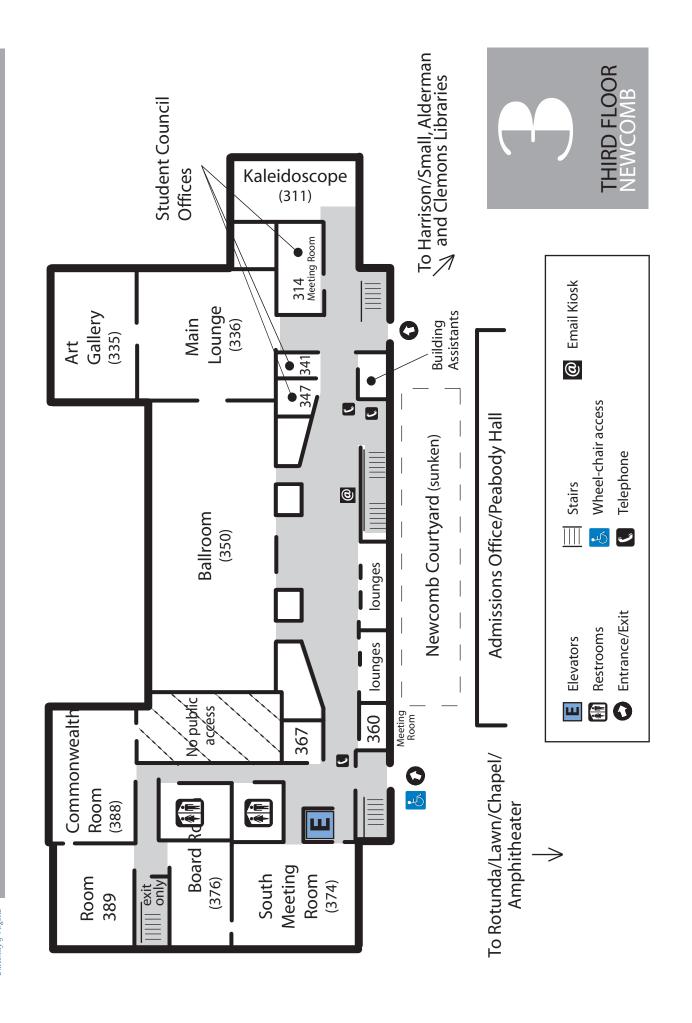
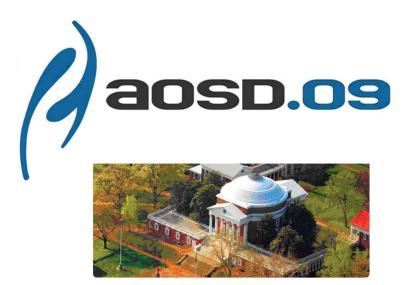
# NEWCOMB HALL UNIVERSITY STUDENT CENTER





# 8th International Conference on Aspect-Oriented Software Development



University of Virginia Charlottesville, VA USA March 2 - 6, 2009



**Software Engineering Institute**Carnegie Mellon



In Cooperation With:





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2

### **Kevnote Presentations**



Paul Daugherty Chief Technology Architect, Accenture Wednesday, March 4, 9:00 am - 10:30 am

Biography – Paul Daugherty is Accenture's Chief Technology Architect, and also serves as Managing Director of Accenture's Custom and Emerging Systems Integration (SI) business. In the Chief Technology Architect role, Paul is responsible for shaping Accenture's architecture strategy and assets, and for managing over 3,000 technology architects who work around the globe and across industries implementing complex, leading-edge technology solutions for Accenture's clients. His current focus areas include Service Oriented Architectures, Software as a Service, Web 2.0, Cloud Computing, Legacy Renewal, Open Source, and Mobility.

As Managing Director of the Custom and Emerging SI business, Paul has responsibility for Accenture's Systems Integration business on custom platforms, industry and domain-specific software packages, and new/emerging technology platforms.

Prior to these roles, Paul led Accenture's Technology business in the Resources operating group, which serves clients in the utilities, energy, natural resources, and chemicals sectors. Paul has also been instrumental in leading Accenture initiatives in areas such as eCommerce, and more recently, CIO Agenda, which is focused on rapidly growing the architecture and innovation areas of Accenture's business.

Paul has worked with clients in many industries in areas such as complex systems delivery, infrastructure services, architecture, and IT strategy. Paul has also been involved in selling and delivering large Business Process Outsourcing (BPO) and IT Outsourcing (ITO) engagements.

Paul has a degree in Computer Engineering from the University of Michigan. He frequently speaks at conferences on industry and technology issues, and has published articles in a variety of publications. He is Chairman of the Advisory Board of the New York-based Academy of Information Technology, a non-profit organization that works with high schools to increase IT career opportunities for urban youths. Paul is based in New York City, and lives in New Jersey with his wife and four children.

## The Future of Software Architectures for Large-Scale Business Solutions: Modularity, Scalability, and Separation of Concerns

Abstract – Modern software projects are of large scale, often involving years of development, tens of thousands of days of work effort, and millions of lines of code. This complexity is aggravated by the fact that development is often distributed over several geographic locations, as dictated by cost considerations, the availability of domain specialists, legal requirements, and other factors. Despite advances in development tools and techniques, software initiatives have lagged behind in utilizing novel software engineering methods and techniques effectively to reduce the complexity of large-scale software. The results can be seen in Corporate and Government IT budgets - based on Accenture and Industry research, IT cost overruns are still commonplace, and the cost to "keep the lights on" for fragile legacy applications typically consumes up to 60% IT budgets.

Increased adoption of advanced software engineering techniques holds great promise for solving these key business challenges. For example, modularization holds a promise in reducing complexity of software

design by hiding low-level implementations in well-defined units of deployment. Specifically, vendors build platforms that allow architects to design large-scale systems that can be composed out of services on the fly. For example, JBoss built a platform that allows architects to seamlessly integrate Service-Oriented Architecture (SOA) with application and business-process management (BPM) in enterprise distributions. According to research with Accenture's CIO Council, at least 58% of global organizations are implementing or piloting SOA.

Proper separation of concerns is a key to effective modularization. While separation of concerns is more of art than science in the work of software architects, novel technologies that enable effective separation of concerns are gaining traction. Most recently Accenture used AOP on a government project to do audit tracking. It was very successful and the techniques are currently being incorporated in Accenture Delivery Architecture (ADA), which is a standards-based architecture used for very large scale software development. A large focus of our efforts is in making advanced software engineering techniques more "consumable" by across our network of developers - this is done through standardized architectures, reference applications, and training.

The talk will focus on progress that has been made, and challenges ahead in driving further business value through use of these types of techniques. In addition to the areas mentioned, we will focus on related issues such as: requirements traceability, automated software quality assurance, role of DSLs and MDA, and Agile techniques.



John A. Stankovic BP America Professor, Department of Computer Science, University of Virginia Thursday, March 5, 9:00 am - 10:30 am

Biography – John A. Stankovic received his Ph.D. from Brown University in 1979 and then served on the faculty of the University of Massachusetts at Amherst. He came to the University of Virginia as BP America Professor and Chair of the Department of Computer Science in 1997. Professor Stankovic is a Fellow of the IEEE, a Fellow of the ACM, and he served on the Computing Research Association Board of Directors for nine years. He received an IEEE Award for Outstanding Technical Contributions and Leadership in Real-Time Systems, and an Outstanding Scholar Award from the University of Massachusetts. He was Co-Founder and Co-Editor-in-Chief of the International Journal on Real-Time Systems, Editor-in-Chief of IEEE Transactions on Parallel and Distributed Computing, Associate Editor for ACM Transactions on Wireless Sensor Networks, Associate Editor for ACM Transactions on Embedded Systems, and Book Series Editor for Real-Time Systems.

### Cyber Physical Systems: Aspects as a Basis for Robustness and Openness

Abstract – As discussed in a recent report for which I was a co-author, "as computers and communication bandwidth become faster and cheaper, computing and communication capabilities will be embedded in all types of objects and structures in the physical environment. Applications with enormous societal impact and economic benefit will be created by harnessing these capabilities in time and across space. We refer to systems that bridge the cyber-world of computing and communications with the physical world as cyber-physical systems (CPS). The internet transformed how humans interact and communicate with one another, revolutionized how and where information is accessed, and even changed how people buy and sell in the marketplace. Similarly, CPS will transform how humans interact with and control the physical world around us. Examples of CPS include medical devices and systems, aerospace systems, transportation vehicles and intelligent highways, defense systems,

3

robotic systems, process control, factory automation, building and environmental control and smart spaces. However, the confluence of recent key technologies is fundamentally altering how these types of systems will operate. For example, the level of uncertainty in which these systems operate is growing (hence the need for greater robustness), and pervasive wireless access is opening these systems to unprecedented dynamic and non-deterministic influences." This talk will describe this new and emerging field called CPS. The talk will focus on what is new and why we need fundamentally new approaches to face robustness and openness challenges. Aspect-oriented programming will be proposed as a possible basis for key work in CPS.



Gail Murphy, Professor Department of Computer Science, University of British Columbia Friday, March 6, 9:00 am - 10:30 am

Biography – Gail Murphy is a Professor in the Department of Computer Science at the University of British Columbia. She joined UBC in 1996 after completing Ph.D. and M.S. degrees at the University of Washington. Before returning to graduate school, she worked as a software developer at a telecommunications company for five years. She also holds a B.Sc. degree from the University of Alberta. She works primarily on building simpler and more effective tools to help developers manage software evolution tasks. In 2005, she held a UBC Killam Research Fellowship and also received the AITO Dahl-Nygaard Junior Prize for her work in software evolution. In 2006, she received an NSERC Steacie Fellowship and the CRA-W Anita Borg Early Career Award. In 2007, she helped co-found and is currently Chair of the Board and COO of Tasktop Technologies Inc. In 2008, she served as the program committee chair for the ACM SIGSOFT FSE conference and received the University of Washington College of Engineering Diamond Early Career Award. One of the most rewarding parts of her career has been collaborating with many very talented graduate and undergraduate students.

### **Everyday Aspects**

Abstract – Everyday, programmers perform software evolution tasks that require accessing information from, and often making changes to, multiple modules comprising the target software system. For some of these tasks, aspect-oriented programming languages provide a means of improving the modularization of the target system, making it easier to perform desired evolutionary changes. For other tasks, it can be either too difficult or considered too costly to use a language to describe the modularization associated with a task. In many of these cases, we have found it effective to infer a task-specific form of modularity based on how programmers interact with the source comprising the system. This approach is the basis of the Eclipse Mylyn tools and frameworks, which are being used daily by hundreds of thousands of programmers to reduce information overload, enable recall of modularity associated with tasks and improve programming productivity.

Everyday, information workers also perform tasks that require accessing information from, and often making changes to, documents spread across their computer desktops, their organization and the world. How do the tasks of these information workers compare to those of programmers? Could these workers benefit from expressing modularity across information using ideas from aspect-oriented languages? Could these workers benefit from task-specific modularity based on how they access documents and related artifacts?

This talk will consider how ideas from the aspect-oriented community can extend beyond the software domain to improve the interaction of information workers with digital information.

### Sunday, March 1

### **Student Events - Spring School**

Location: Mechanical and Aerospace Engineering Department, Room MEC 339

### **Expert Panelists**

Languages: Hidehiko Masuhara (University of Tokyo, Japan)

Mira Mezini (Technische Universität Darmstadt, Germany)

Analysis and Design: Alessandro Garcia (Pontifícia Universidade Católica do Rio de Janeiro, Brazil)

Formal Methods: Mario Südholt (École des Mines de Nantes, France)
Applications: Yvonne Coady (University of Victoria, Canada)

9:00 am Introduction Breakfast

10:00 am Panel of Evaluation for AOSD

12:00 pm Lunch

1:30 pm Thesis Evaluation Workshop

3:00 pm Break

3:30 pm Collaborative Paper Writing Workshop

5:30 pm Break

6:00 pm Question/Answer Session

**Evening Dinner at Baja Bean** 

We thank AOSD Europe for helping to sponsor the Student Events at AOSD.09

### Monday, March 2

### Registration starts at 8 am.

Location: Entry Hallway, Newcomb Hall 3rd Floor (entry on ground level from McCormick Drive, the main road through campus).

### Workshops (9:00am through 5:30pm)

Workshops start at 9 am and have catered coffee breaks at 10:30 and 3:30. Workshops will break for lunch at local eating establishments from 12:30PM to 2PM.

### **ACP4IS: Aspects, Components, and Patterns for Infrastructure Software**

Eric Wohlstadter (University of British Columbia, Canada), Daniel Lohmann (Friedrich-Alexander University Erlangen-Nuremberg, Germany), Chris Matthews (University of Victoria, Canada)

Location: Room 389

### **AOM: Thirteenth Workshop on Aspect-Oriented Modeling**

Omar Aldawud (Illinois Institute of Technology, USA), Walter Cazzola (University of Milano, Italy), Thomas Cottenier (HengSoft, USA), Jeff Gray (University of Alabama at Birmingham, USA), Jörg Kienzle (McGill University, Canada), Dominik Stein (University of Duisburg-Essen, Germany)

Location: Board Room

### **FOAL: Foundations of Aspect-Oriented Languages**

Gary T. Leavens (University of Central Florida, USA), Curtis Clifton (Rose-Hulman Institute of Technology, USA), Mira Mezini (Darmstadt University of Technology, Germany), Shmuel Katz (Technion–Israel Institute of Technology, Israel)
Location: Commonwealth

### Tuesday, March 3

### Registration (opens at 8am)

Location: Entry Hallway, Newcomb Hall 3rd Floor (entry on ground level from McCormick Drive, the main road through campus).

### Workshops (9:00am through 5:30pm)

### **DSAL: Fourth Workshop on Domain-Specific Aspect Languages**

Thomas Cleenewerck (Vrije Universiteit Brussel, Belgium), Johan Fabry (University of Chile, Chile), Anne-Françoise Le Meur (University of Lille, France), Jacques Noyé (École des Mines de Nantes, France), Éric Tanter (University of Chile, Chile) Location: Room 389

### **EA: Workshop on Early Aspects**

Alessandro Garcia (Pontifícia Universidade Católica do Rio de Janeiro, Brazil), Nan Niu (University of Toronto, Canada), Ana Moreira (New University of Lisbon, Portugal), João Araújo (New University of Lisbon, Portugal)

Location: Commonwealth

### **PLATE: Practices of Linking Aspect Technology and Evolution**

Iris Groher (Johannes Kepler University Linz, Austria), Andy Kellens (Vrije Universiteit Brussel, Belgium), Christa Schwanninger (Siemens AG, Germany), Bram Adams (Queen's University, Canada), Uwe Hohenstein (Siemens AG, Germany), Ademar Aguiar (Universidade do Porto, Portugal), Eddy Truyen (Katholieke Universiteit Leuven, Belgium)

Location: Board Room

### Birds of a Feather (3:00pm through 5:30pm, with a break at 3:30 pm)

### **JBoss AOP**

Kabir Khan (JBoss AOP Lead. JBoss, a division of Red Hat) Flavia Rainone (JBoss AOP Developer. JBoss, a division of Red Hat) Location: South Meeting Room

**Note:** Sign-up sheets for impromptu Birds of a Feather sessions will be at the registration area.

### Wednesday, March 4

### 8:00 am Registration (opens at 8am) & Breakfast

Location: Entry Hallway, Newcomb Hall 3rd Floor (entry on ground level from McCormick Drive, the main road through campus). Breakfast will be served in the Main Lounge; Participants may eat in the Ballroom

### 9:00 am Welcome and Keynote

The Future of Software Architectures for Large-Scale Business Solutions: Modularity, Scalability, and Separation of Concerns

Paul Daugherty (Accenture, USA)

Location: Ballroom

### 10:30 am Break

Location: Main Lounge

### **Demo Madness (from 10:40am through 10:55am)**

Andy Kellens (Vrije Universiteit Brussel, Belgium) – Demonstrations Co-Chair Naoyasu Ubayashi (Kyushu Institute of Technology, Japan) – Demonstrations Co-Chair

Location: Ballroom

### 11:00 am Research Session 1: Programming Languages

Mehmet Aksit (University of Twente, The Netherlands) – Session Chair Location: Ballroom

Dependent Advice: A General Approach to Optimizing History-based Aspects Eric Bodden (McGill University, Canada); Feng Chen, Grigore Rosu (University of Illinois at Urbana-Champaign, USA)

The Dataflow Pointcut – A Formal and Practical Framework

Dima Alhadidi, Amine Boukhtouta, Nadia Belblidia, Mourad Debbabi, Prabir

Bhattacharya (Concordia University, Canada)

Expressive Scoping of Distributed Aspects

Éric Tanter, Johan Fabry (University of Chile, Chile); Rémi Douence, Jacques Noyé, Mario Südholt (École des Mines de Nantes, France)

### **Demo Session 1A**

Location: Room 389

D1: A GUI Tool for FODA Feature Diagrams
Shin Nakajima (National Institute of Informatics, Japan); Taimei Aoki, Katsunori Imai
(GLATTS, Inc., Japan)

D2: MAJOR and CARAJillo: Aspect Weaving in the Java Class Library

Alex Villazón, Walter Binder, Philippe Moret (University of Lugano, Switzerland)

### 12:30 pm Lunch (provided to all registered participants)

Location: Lunch will be served in the Main Lounge; Participants may eat in the Ballroom

### 2:00 pm Research Session 2: Aspect Interference

Hridesh Rajan (Iowa State University, USA) – Session Chair Location: Ballroom

A Graph-Transformation-Based Simulation Approach for Analysing Aspect Interference on Shared Join Points

Mehmet Aksit, Arend Rensink, Tom Staijen (University of Twente, The Netherlands)

The Art of the Meta-Aspect Protocol

Tom Dinkelaker, Mira Mezini, Christoph Bockisch (Technische Universität Darmstadt, Germany)

Flexible Calling Context Reification for Aspect-Oriented Programming

Alex Villazón, Walter Binder, Philippe Moret (University of Lugano, Switzerland)

### **Demo Session 2A**

Location: Room 389

D3: Efficient Software Product Line Development – The Aspect-Oriented Way Iris Groher (Johannes Kepler University Linz, Austria); Christa Schwanninger (Siemens AG, Germany); Markus Vöelter (Independent Consultant, Germany)

D4: Building a Next-Generation Digital News Publishing Platform with AOSD Steven Op de beeck, Dimitri Van Landuyt, Eddy Truyen, Wouter Joosen (Katholieke Universiteit Leuven, Belgium)

### 3:30 pm Break

Location: Main Lounge

### 4:00 pm Research Session 3: Software Architecture and Modeling

Mira Mezini (Technische Universität Darmstadt, Germany) – Session Chair

Location: Ballroom

Domain-driven Discovery of Stable Abstractions for Pointcut Interfaces Dimitri Van Landuyt, Steven Op de beeck, Eddy Truyen, Wouter Joosen (Katholieke Universiteit Leuven, Belgium)

Aspect-Oriented Multi-View Modeling

Jörg Kienzle, Wisam Al Abed (McGill University, Canada); Jacques Klein (Université du Luxembourg, Luxembourg)

From Sequence Diagrams to Java-STAIRS Aspects Jon Oldevik, Øystein Haugen (Universitetet i Oslo, Norway)

Composing Architectural Aspects Based on Style Semantics Christina Chavez (Universidade Federal da Bahia, Brazil); Alessandro Garcia (Pontificia Universidade Católica do Rio de Janeiro, Brazil); Thais Batista, Marcel Oliveira (Universidade Federal do Rio Grande do Norte, Brazil); Claudio Sant'anna (Universidade Federal da Bahia, Brazil); Awais Rashid (Lancaster University, UK)

### **Demo Session 3A**

Location: Room 389

D5: drUID – Unexpected Interactions Detection André Restivo, Ademar Aguiar (Universidade do Porto, Portugal)

D6: AOJS: Aspect-Oriented Programming Framework for JavaScript Hironori Washizaki, Atsuto Kubo, Tomohiko Mizumachi, Kazuki Eguchi, Yoshiaki Fukazawa (Waseda University, Japan)

### 5:30 pm Demo Session 4A

Location: Main Lounge

D7: A System for Supporting Collaboration with Designers by Aspect-Oriented Approach in RIA Development *Hiroaki Fukuda (Keio University, Japan)* 

D8: R3V3RS3: Querying for Syntactical Patterns of Conditional Compilation Usage Bram Adams, Ahmed Hassan (Queen's University, Canada); Herman Tromp (Ghent University, Belgium); Wolfgang De Meuter (Vrije Universiteit Brussel, Belgium)

### 6:30 pm Reception

Location: Main Lounge

### **Student Events - Poster Event**

Location: Art Gallery

Optimizing Dynamic Pointcuts by using SCoPE Tomoyuki Aotani (Tokyo Institute of Technology, Japan)

Concern Comprehension and Visualization: How Low Can You Go? Jen Baldwin (University of Victoria, Canada)

Design Strategies for Reusable Aspects

Maarten Bynens (Katholieke Universiteit Leuven, Belgium)

Enforcing Security for Desktop Clients using Authority Aspects Brett Cannon (University of British Columbia, Canada)

Modeling, Verification, and Testing of Non-Functional Requirements with Aspects *Zhanqi Cui (Nanjing University, China)* 

Pluggable and OPen Aspect RunTime (POPART) - Versatile Semantics for Aspects using a Meta-Aspect Protocol

Tom Dinkelaker (Technische Universität Darmstadt, Germany)

Aspect-Oriented Generation of the API Documentation for AspectJ Michihiro Horie (Tokyo Institute of Technology, Japan)

Taming Strongly Invasive Aspects

Emilia Katz (Technion - Israel Institute of Technology, Israel)

Enforcing Behavioral Constraints in Evolving Aspect-Oriented Programs Raffi Khatchadourian (The Ohio State University, USA)

Improving Aspect Oriented Modularity with Design Rules
Arthur Marques (Universidade Federal de Campina Grande, Brazil)

Federated Virtual Macro Components Chris Matthews (University of Victoria, Canada)

DandyJ: A Dynamic Distributed AOP language for Modular Implementations of Coordinated Weaving Satoshi Morita (Tokyo Institute of Technology, Japan)

An Aspect for Resolving Aspect Interactions
Fuminobu Takeyama (Tokyo Institute of Technology, Japan)

### Thursday, March 5

### 8:00 am Registration (opens at 8am) & Breakfast

Location: Entry Hallway, Newcomb Hall 3rd Floor (entry on ground level from McCormick Drive, the main road through campus). Breakfast will be served in the Main Lounge; Participants may eat in the Ballroom

10

### 9:00 am Keynote

Cyber Physical Systems: Aspects as a Basis for Robustness and Openness

John A. Stankovic (University of Virginia, USA)

Location: Ballroom

### 10:30 am Break

Location: Main Lounge

### 11:00 am Research Session 4: Aspect-Oriented Requirements Engineering

Betty Cheng (Michigan State University, USA) – Session Chair

Location: Ballroom

Modeling Scenario Variability as Crosscutting Mechanisms Rodrigo Bonifácio, Paulo Borba (Universidade Federal de Pernambuco, Brazil)

Concept Analysis for Product Line Requirements
Nan Niu, Steve Easterbrook (University of Toronto, Canada)

Semantic vs. Syntactic Compositions in Aspect-Oriented Requirements Engineering: an Empirical Study

Ruzanna Chitchyan, Phil Greenwood, Americo Sampaio, Awais Rashid (Lancaster University, UK); Alessandro Garcia (Pontificia Universidade Católica do Rio de Janeiro, Brazil); Lyrene Fernandes da Silva (Universidade Federal do Rio Grande do Norte, Brazil)

### **Demo Session 1B**

Location: Room 389

D1: A GUI Tool for FODA Feature Diagrams
Shin Nakajima (National Institute of Informatics, Japan); Taimei Aoki, Katsunori Imai
(GLATTS, Inc., Japan)

D2: MAJOR and CARAJillo: Aspect Weaving in the Java Class Library

Alex Villazón, Walter Binder, Philippe Moret (University of Lugano, Switzerland)

### 12:30 pm Lunch (provided to all registered participants)

Location: Lunch will be served in the Main Lounge; Participants may eat in the Ballroom

### 12:45 pm Industry Panel

Mark Grechanik (Accenture, USA) – Session Chair Location: Ballroom

Challenges and Roadmap for Using AOSD in Industry

Robert Baillargeon (Panasonic Automotive Systems, USA); Mark Grechanik (Accenture, USA); Nikhil Kumar (Applied Technology Solutions, Canada); Denys Poshyvanyk (College of William and Mary, USA); Eric Wohlstadter (University of British Columbia, Canada)

### 2:00 pm Research Session 5 : Testing and Verification

Shmuel Katz (The Technion-Israel Institute of Technology, Israel) – Session Chair Location: Ballroom

Modular Verification of Dynamically Adaptive Systems

Ji Zhang, Heather Goldsby, Betty Cheng (Michigan State University, USA)

A Generic and Reflective Debugging Architecture to Support Runtime Visibility and Traceability of Aspects

Wouter De Borger, Bert Lagaisse, Wouter Joosen (Katholieke Universiteit Leuven, Belgium)

Automated Test Data Generation for Aspect-Oriented Programs

Mark Harman (King's College London, UK); Fayezin Islam (T-Zero Processing Services LLC, USA); Tao Xie (North Carolina State University, USA); Stefan Wappler (Berner & Mattner Systemtechnik GmbH, Germany)

### **Demo Session 3B**

Location: Room 389

D5: drUID – Unexpected Interactions Detection

André Restivo, Ademar Aquiar (Universidade do Porto, Portugal)

D6: AOJS: Aspect-Oriented Programming Framework for JavaScript Hironori Washizaki, Atsuto Kubo, Tomohiko Mizumachi, Kazuki Eguchi, Yoshiaki Fukazawa (Waseda University, Japan)

### **Demo Session 5A**

Location: Board Room

D9: Lavash: Lancaster Variability Analysis Toolkit for Heterogeneous Requirements Sets Joost Noppen, Nathan Weston (Lancaster University, UK); Alberto Sardinha (Carnegie Mellon University, USA); Ruzanna Chitchyan, Phil Greenwood, Awais Rashid (Lancaster University, UK)

D10: Rejuvenate Pointcut: A Tool for Pointcut Expression Recovery in Evolving Aspect-Oriented Software

Raffi Khatchadourian (The Ohio State University, USA); Phil Greenwood, Awais Rashid (Lancaster University, UK)

### 3:30 pm Break

Location: Main Lounge

### 4:00 pm Industry Session : Aspects in Industry

Robert Baillargeon (Panasonic Automotive Systems, USA) – Session Chair Location: Ballroom

Enabling the Adoption of Aspects – Testing Aspects: A Risk Model, Fault Model and Patterns Nikhil Kumar, Dinakar Sosale, Sadhana Nivedita Konuganti, Ajay Rathi (Applied Technology Solutions, Canada)

Modelling Hardware Verification Concerns Specified in the e Language: An Experience Report Darren Galpin (Infineon Technologies, UK); Cormac Driver, Siobhán Clarke (Trinity College Dublin, Ireland)

Using Aspect Orientation in Industrial Projects: Appreciated or Damned? Uwe Hohenstein, Michael Jäger (Siemens AG, Germany)

Aspect-Oriented Programming with Hidden Markov Models to Verify Design Use Cases German Florez-Larrahondo, Walker Haddock (Verari Systems, Inc., USA)

### **Demo Session 2B**

Location: Room 389

D3: Efficient Software Product Line Development – The Aspect-Oriented Way Iris Groher (Johannes Kepler University Linz, Austria); Christa Schwanninger (Siemens AG, Germany); Markus Vöelter (Independent Consultant, Germany)

D4: Building a Next-Generation Digital News Publishing Platform with AOSD Steven Op de beeck, Dimitri Van Landuyt, Eddy Truyen, Wouter Joosen (Katholieke Universiteit Leuven, Belgium)

### 5:30 pm Demo Session 4B

Location: Main Lounge

D7: A System for Supporting Collaboration with Designers by Aspect-Oriented Approach in RIA Development Hiroaki Fukuda (Keio University, Japan)

D8: R3V3RS3: Querying for Syntactical Patterns of Conditional Compilation Usage Bram Adams, Ahmed Hassan (Queen's University, Canada); Herman Tromp (Ghent University, Belgium); Wolfgang De Meuter (Vrije Universiteit Brussel, Belgium)

### 6:30 pm Cocktail hour

Location: Boars Head Inn

Please be at Newcomb Hall (McCormick Road Entrance) by 6:00 pm to load the buses.

### 7:30 pm Banquet

Location: Boars Head Inn

### Friday, March 6

### 8:00 am Registration & Breakfast

Location: Entry Hallway, Newcomb Hall 3rd Floor (entry on ground level from McCormick Drive, the main road through campus). Breakfast will be served in the Main Lounge; Participants may eat in the Ballroom

### 9:00 am Keynote

**Everyday Aspects** 

Gail Murphy (University of British Columbia, Canada)

Location: Ballroom

### 10:30 am Break

Location: Main Lounge

# 11:00 am Research Session 6 : Domain-Specific Aspect Languages and Applications

Alessandro Garcia (Pontifícia Universidade Católica do Rio de Janeiro, Brazil) – Session Chair Location: Ballroom

### Metaproperty Aspects

Clayton Myers, Elisa Baniassad (The Chinese University of Hong Kong, Hong Kong)

Can We Refactor Conditional Compilation into Aspects?

Bram Adams (Queen's University, Canada); Wolfgang De Meuter (Vrije Universiteit Brussel, Belgium); Herman Tromp (Ghent University, Belgium); Ahmed Hassan (Queen's University, Canada)

Enforcing Security for Desktop Clients using Authority Aspects Brett Cannon, Eric Wohlstadter (University of British Columbia, Canada)

### **Demo Session 5B**

Location: Room 389

D9: Lavash: Lancaster Variability Analysis Toolkit for Heterogeneous Requirements Sets Joost Noppen, Nathan Weston (Lancaster University, UK); Alberto Sardinha (Carnegie Mellon University, USA); Ruzanna Chitchyan, Phil Greenwood, Awais Rashid (Lancaster University, UK)

D10: Rejuvenate Pointcut: A Tool for Pointcut Expression Recovery in Evolving Aspect-Oriented Software

Raffi Khatchadourian (The Ohio State University, USA); Phil Greenwood, Awais Rashid (Lancaster University, UK)