ICGSE
2016

www.icgse.org
August 2-5, 2016 ✦ Orange County, USA

11th IEEE International Conference on Global Software Engineering

Software Bridging Distances Between People

CONFERENCE PROGRAM

IEEE

IEEE computer society

UCI Donald Bren
School of Information & Computer Sciences

SIEMENS

Microsoft

INSTITUTE for SOFTWARE RESEARCH
UNIVERSITY of CALIFORNIA · IRVINE

CRADL
Collaboration Research
in Action, Design,
& Learning

GENERAL CHAIR
David Redmiles, University of California, Irvine, USA

PROGRAM CHAIRS
Marco Aurelio Gerosa, University of São Paulo, Brazil

Tobias Hildenbrand, SAP SE, Germany

WORKSHOPS CHAIRS
Sabrina Marczak, PUCRS, Brazil

Paolo Tell, IT University of Copenhagen, Denmark

TUTORIALS CHAIRS
Ban Al-Ani, Automatic Data Processing (ADP) & University of California, Irvine, USA

Roberto Silva Filho, GE Global Research, USA

DOCTORAL SYMPOSIUM CHAIRS
Marco Kuhrmann, University of Southern Denmark, Germany

Sarah Beecham, Lero – The Irish Software Engineering Centre, Ireland

POSTERS CHAIR
Erik Trainer, Carnegie Mellon University, USA

PROCEEDINGS CHAIR
Igor Steinmacher, Federal University of Technology - Paraná, Brazil

PUBLICITY CHAIR
Alexander Nolte, University of Bochum, Germany

SOCIAL MEDIA CHAIR
Mengyao Zhao, University of California, Irvine, USA

WEBMASTER
Andrea Stockl, Independent, Brazil

CONFERENCE MANAGER AND FINANCE CHAIR
Debra A. Brodbeck, University of California, Irvine, USA

STEERING COMMITTEE COORDINATOR
Christof Ebert, Vector Consulting Services, Germany

PROGRAM COMMITTEE

Nazareno Aguirre, Universidad Nacional de Río Cuarto, Argentina

Ban Al-Ani, Automatic Data Processing (ADP) & University of California, Irvine, USA

Muhammad Ali Babar, IT University of Copenhagen, Denmark

Alberto Avritzer, Sonatype, USA

Julian Bass, Robert Gordon University, Scotland

Sarah Beecham, University of Limerick & Lero, Ireland

Pernille Bjorn, University of Copenhagen, Denmark

Ivana Bosnic, University of Zagreb, Croatia

Fabio Calefato, University of Bari, Italy

Marcelo Cataldo, EMC Corp, USA

Tony Clear, Auckland University of Technology, New Zealand

Daniela Damian, University of Victoria, Canada

Elisabetta Di Nitto, Politecnico di Milano, Italy

Yvonne Dittrich, IT University of Copenhagen, Denmark

Christof Ebert, Vector Consulting, Germany

Uli Eisert, SAP, Switzerland

Christian Estler, ETH Zurich, Switzerland

Fernando Figueira, Universidade Federal do Rio Grande do Norte, Brazil

Juergen Heymann, SAP, Germany

Akinori Ihara, Nara Institute of Science and Technology, Japan

Thomas Kude, University of Mannheim, Germany

Marco Kuhrmann, University of Southern Denmark, Denmark

Filippo Lanubile, University of Bari, Italy

Thomas D. LaToza, George Mason University, USA

Christian Lescher, Siemens AG, Germany

Sabrina Marczak, PUCRS, Brazil

Raffaela Mirandola, Politecnico di Milano, Italy

Nils Brede Moe, SINTEF ICT, Norway

Audris Mockus, University of Tennessee & Avaya Labs Research, USA

Juergen Muench, University of Helsinki, Finland

Leonardo Murta, Universidade Federal Fluminense, Brazil

Martin Naedele, ABB, Switzerland

Mahmood Niazi, King Fahd University of Petroleum and Minerals, Saudi Arabia

Alexander Nolte, University of Bochum, Germany

Martin Nordio, ETH Zurich, Switzerland

Maria Paasivaara, Helsinki University of Technology, Finland

Xin Peng, Fudan University, China

Rafael Prikladnicki, PUCRS, Brazil

Narayan Ramasubbu, University of Pittsburgh, USA

Ita Richardson, University of Limerick & Lero, Ireland

Anita Sarma, Oregon State University, USA

Leif Singer, University of Victoria, Canada

Darja Smite, Blekinge Institute of Technology, Sweden

Igor Steinmacher, Universidade Tecnológica Federal do Paraná, Brazil

Bedir Tekinerdogan, Wageningen University, Turkey

Paolo Tell, IT University, Denmark

Erik Trainer, Carnegie Mellon University, USA

Guilherme Travassos, Federal University of Rio de Janeiro, Brazil

Christoph Treude, University of São Paulo, Brazil

Giuseppe Valetto, Drexel University, USA

Rini Van Solingen, Delft University of Technology, Netherlands

Aurora Vizcaíno, Universidad de Castilla - La Mancha, Spain

Yi Wang, IBM Almaden Research Center, USA

Igor Wiese, Universidade Tecnológica Federal do Paraná, Brazil

Volker Wulf, University of Siegen, Germany

Mansooreh Zahedi, IT University of Copenhagen, Denmark

PARIS: Methods and Tools for Project/Architecture/Risk Management in Globally Distributed Software Development Projects

Tuesday, 9:00 - 12:30 | Room 5011

The goal of this workshop is to provide a forum for researchers and professionals interested in global software development to discuss and exchange ideas. In particular, this workshop takes the perspective of the practitioner and focuses on the techniques that will help software professionals to meet the unique challenges in a global development environment. Thus, the major goal of this workshop is to discuss novel methodologies for risk management for global software development. Additionally, we want to provide a platform bringing together researches and practitioners in order to share their knowledge and requirements in the field of offshore software development.

GSE-Ed'16: Inaugural Workshop on Global Software Engineering Education

Tuesday, 9:00 - 5:30 | Room 6011

This workshop deals with contemporary issues in Computer Science and Software Engineering Education. Universities preparing students for the workplace are recognizing the need to provide courses that reflect some of the challenges of distributed development. This workshop will present research that facilitates course leaders embarking on GSE-Ed. We now solicit research papers on any aspect of GSD-Ed, ranging from problems experienced in the classroom and lessons learned, to frameworks providing a complete solution. While we encourage practical-experienced based papers, we also will consider papers that present a theoretical perspective.

TUTORIALS

T1: Scaling Agile to Large Globally Distributed Organizations

Tuesday, 2:00 - 5:30 | Room 5011
Prof. Casper Lassenius and Dr. Maria Paasivaara, Aalto University, Finland

The objective of this tutorial is to share our findings on a) Challenges and success factors for adopting agile to large-scale organizations, and b) Challenges and successful practices for scaling agile to large and globally distributed organizations.

Target Audience
The tutorial is aimed especially to practitioners who are planning to adopt or have adopted agile in their large, globally distributed organization or project. Researchers interested in the topic are also welcome.
Tutorial Level
Intermediate. The audience is expected to have basic knowledge on agile software development.

T2: What did you say? Mindful (Intercultural) Communication for Successful Projects

Tuesday, 2:00 - 5:30 | Room 4011
Frederick Zarndt, Global Connexions, USA

Expect to take away practical tools to understand your own cultural biases and in-class practice mindful communication with your colleagues from other cultures as well as your own. You will also learn about frameworks for understanding other cultures based on work by Geert Hofstede, Fons Trompenaars, and others as well as on the presenter's own experiences.

Target Audience
Anyone can benefit, but especially those who frequently communicate with colleagues from other cultures.

T3: Issues, Challenges, and Opportunities in Open Source Software Development for Global Software Engineering

Wednesday, 9:00 - 12:30 | Room 6011,
Dr. Walt Scacchi, University of California, Irvine, USA

Expect to take away practical tools to understand This tutorial serves to introduce and educate software developers, system architects, project managers, educators, and others in the state of the art in open source software development processes, work practices, and project community dynamics. The focus is to examine and review results from empirical studies of OSSD that have appeared in the past 5-10 years.

Target Audience
Software developers, system architects, project managers, program managers, and others who anticipate the acquisition, adoption, implementation, or integration of OSS systems, components, processes, practices or project communities in current/future system development efforts.

T4: Distributed Development – Lessons from Industry

Wednesday, 9:00 - 12:30 | Room 5011
Christof Ebert, Vector Consulting Services, Germany

This tutorial by renowned industry expert Christof Ebert summarizes concrete experiences and guidance from industry. It looks to techniques and tools for successfully handling global software development and sourcing. This tutorial specifically addresses industry persons who want to ramp up fast on best practices in GSE.

Target Audience
Software engineers, team leads, project managers, line managers, experts and managers from procurement / sourcing and quality, consultants.
Tutorial Level
Basic – Intermediate.

WEDS, AUG 3 | Chair: Tobias Hildenbrand, SAP, Germany

Sanjay Shirolé, Vice President, Innovation Center Silicon Valley, SAP, USA
A New Vision of Innovation

ABSTRACT. In this talk Sanjay will discuss how SAP, a large global software company, is experimenting with a radically different innovation concept called HanaHaus which was successfully launched in the Silicon Valley under his leadership. The idea and vision for HanaHaus was conceptualized by Dr. Hasso Plattner, Co-founder and Chairman of SAP, to create an ecosystem to foster a vibrant culture of technology, innovation and entrepreneurship beyond the boundaries of SAP.

BIOGRAPHY. Sanjay Shirolé is a Vice President at the SAP Innovation Center Silicon Valley where he heads the SCALE effort. Sanjay and his team help build and launch new products for early adopter customers. Before joining SAP, Sanjay spent over 15 years as an entrepreneur successfully founding and leading two software startups in the Silicon Valley, including Xora, a global leader in mobile, cloud based, location aware workforce management solutions. He is very passionate about entrepreneurship, especially as it relates to the democratization of technology for small and medium businesses. He continues to mentor and provide advice to technology entrepreneurs worldwide.

THURS, AUG 4 | Chair: Marco Gerosa, University of São Paulo, Brazil

Margaret-Anne Storey, Professor of Computer Science, University of Victoria, Canada
To Bot or Not: How Bots Can Support Collaboration in Software Development

ABSTRACT. Software development stakeholders require a constellation of tools to support their communication, collaboration and coordination activities. But poor tool integration can lead to gaps in knowledge flow, or worse, to an overabundance of shared communication and information. The software development community is witnessing the rise of "social bots" to integrate diverse development and communication tools and to address the challenge of information overload. A bot is a conversational user interface that can automate rote or tedious tasks. It may fetch or share information, extract and analyze data, detect and monitor events and activities in communication and social media, connect developers with each other or with other tools, or it may provide feedback on individual and collaborative development tasks. Some bots are emerging as important team members, providing support for individual and team task management and for the automation of dev-ops and customer support. However, the rapid adoption of bots and the platforms that support them brings possible drawbacks. Designing effective platforms for bots is challenging and bots may introduce alienation among stakeholders or lead to other technical challenges. In this talk, I will discuss the emerging role of bots in software development and describe some of the advantages and challenges that may lie ahead.

BIOGRAPHY. Dr. Margaret-Anne Storey is a Professor of Computer Science and the Director of the Software Engineering program at the University of Victoria. She holds a Canada Research Chair in Human and Social Aspects of Software Engineering. Her research goal is to understand how technology can help people explore, understand, and share complex information and knowledge. She evaluates and applies techniques from knowledge engineering, social software, and visual interface design to applications such as collaborative software development, program comprehension, biomedical ontology development, and learning in Web-based environments.

FRI, AUG 5 | Chair: David Redmiles, University of California, Irvine

Andrew Begel, Senior Researcher, Microsoft Research, USA
The ABCs of Software Engineering: Affect, Biometrics, and Cognition

ABSTRACT. Researchers have long investigated how people read, write, and speak about software on their computers to identify the skills, education, and practices needed need to acquire expertise and perform development duties effectively and efficiently. However, until now the methods used to study developer comprehension, expression, and communication have been limited and coarse-grained because there was no way to identify what a developer thought or felt unless it was expressed out loud.

The world has changed. With the introduction of low-cost, widely available, high-fidelity biometric sensors, we can now more directly observe a software developer's cognitive and affective (emotional) processes. The ABCs of Software Engineering is a set of techniques that modernize classic approaches to program comprehension and human interaction by combining (A) principles governing the influence of human *affect* on behavior, (B) *biometric* sensors, and (C) models of *cognition* informed by advances in cognitive neuroscience. Technologies like electroencephalography (EEG), electro-dermal activity sensors (EDA), capacitive sensors, and eye trackers can reveal a software developer's internal emotional states, for example identifying when the developer is confused, frustrated, surprised, stressed, fatigued, or in a highly productive flow state. These affective states can be correlated with code quality, software complexity, development productivity, and effective communication --- the same software outcomes already correlated with developer activities in other research areas such as mining software repositories (MSR) and cooperative and human aspects of software engineering (CHASE). By developing a better understanding of what programmers think and feel when they create and maintain software, we can design tools and interventions to improve their productivity and reduce the impact of their errors.

BIOGRAPHY. Andrew Begel is a Senior Researcher in the VIBE group at Microsoft Research. Andrew studies software engineers to understand how communication, collaboration and coordination behaviors impact their effectiveness in collocated and distributed development. He then builds software tools that incentivize problem-mitigating behaviors. Andrew's recent work focuses on the intersection of social computing and software engineering, and on the use of biometrics to better understand how software developers do their work.

Session 1: People, Teams, and Organizations

Wednesday, 4:15 - 5:45 | ROOM 6011
Chair: Marcos Borges, Universidade Federal do Rio de Janeiro, Brazil

"Hiring in the Global Stage: Profiles of Online Contributions"
Anita Sarma, Oregon State University, USA
Xiaofan Chen, Newnerdy Enterprise Group Limited, New Zealand
Sandeep Kuttal, University of Tulsa, USA
Laura Dabbish, Carnegie Mellon University, USA
Zhendong Wang, University of Nebraska–Lincoln, USA

"Organizational Behavior Engineering for Sustainable Global Software Development" (Industry paper)
Debi Prasad Mahapatra and Dharmesh Khara
Siemens Technology and Services Private Limited, India

"Towards Adopting Alternative Workforce for Software Engineering"
Alpana Dubey, Gurdeep Virdi, Mani Suma Kuriakose, Veenu Arora
Accenture Technology Labs, India

"Communication Challenges and Strategies in Distributed DevOps" (short paper)
Elisa Diel, PUCRS Porto Alegre, Brazil
Sabrina Marczak, PUCRS Porto Alegre, Brazil
Daniela Cruzes, SINTEF, Norway

"Enabling knowledge sharing in agile virtual teams" (Industry paper)
Nils Brede Moe, SINTEF, Norway
Daniela Soares Cruzes, SINTEF, Norway
Tor Erlend Fægri, SINTEF, Norway
Jan Edvard Faugstad, DNV GL, Norway

Session 2: Collaboration and Crowdsourcing

Thursday, 11:00 - 12:30 | ROOM 6011
Chair: Aurora Vizcaíno, University of Castilla-La Mancha, Spain

"An Empirical Evaluation of an Activity-Based Infrastructure for Supporting Cooperation in Software Engineering"
Paolo Tell, IT University of Copenhagen, Denmark
Muhammad Ali Babar, IT University of Copenhagen, Denmark

"Breaking Collaboration Barriers through Communication Practices in Software Crowdsourcing" (short paper)
Leticia Machado, Josiane Kroll, Sabrina Marczak, Rafael Prikladnicki
Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS), Porto Alegre, Brazil

"Dynamics of Software Development Crowdsourcing"
Alpana Dubey, Accenture Technology Labs, India
Kumar Abhinav, IIIT-Delhi, India
Sakshi Taneja, IIIT-Delhi, India
Gurdeep Virdi, Accenture Technology Labs, India
Anurag Dwarakanath, Accenture Technology Labs, India
Alex Kass, Accenture Technology Labs, USA
Mani Suma Kuriakose, Accenture Technology Labs, India

"Communication between Developers and Testers in Distributed Continuous Agile Testing"
Daniela S. Cruzes, Nils Brede Moe, Tore Dyba
SINTEF, Norway

"Agile Workbench: Tying People, Process, and Tools in Distributed Agile Delivery" (Industry paper)
Vibhu Saujanya Sharma and Vikrant Kaulgud
Accenture Technology Labs, India

Session 3: Process Improvement and Agility

Thursday, 2:00 - 3:30 | ROOM 6011
Chair: Nils Brede Moe, SINTEF, Norway

"Scaling Scrum in a Large Globally Distributed Organization: A Case Study"
Maria Paasivaara and Casper Lassenius
Aalto University, Finland

"Scaling Agile Scrum Software Development - Providing Agility and Quality to Platform Development by Reducing Time to Market" (Industry paper)
Madan Mohan Jha, Siemens Technology and Services Pvt. Ltd., India
Rosa Maria Ferrer Vilardell, Siemens Schweiz AG, Switzerland
Jai Narayan, Siemens Industry, Inc., USA

"How does Software Process Improvement address Global Software Engineering?"
Marco Kuhrmann, University of Southern Denmark, Denmark
Philipp Diebold, Fraunhofer IESE, Germany
Juergen Muench, Reutlingen University, Germany
Paolo Tell, IT University of Copenhagen, Denmark

"System testing optimization in a globally distributed software engineering team" (Industry paper)
Tulasi Anand, Chittoor Reddy, V. S. Mani
Siemens Technology and Services Pvt. Ltd., India

"Challenges in Adapting Agile Testing in Legacy Global Configurator Product" (Industry paper)
Rajeev Kumar Gupta, Prabhulinga Manikreddy, Abhinandan Gv.
Siemens Technology and Services Private Limited, India

Session 4: Architecture and System Development

Thursday, 4:00 - 5:30 | ROOM 6011
Chair: Paolo Tell, IT University of Copenhagen, Denmark

"Understanding architectural knowledge sharing in AGSD teams: An empirical study"
Gilberto Borrego, Universidad Autónoma de Baja California, México
Alberto L. Morán, Universidad Autónoma de Baja California, México
Ramón René Palacio Cinco, Instituto Tecnológico de Sonora, México
Oscar M. Rodríguez, Instituto Tecnológico de Hermosillo, México

"SM2PIA: A Model to Support the Development of Pragmatic Interoperability Requirement"
Francila Neiva, Federal University of Rio de Janeiro, Brazil
José Maria N. David, Federal University of Juiz de Fora, Brazil
Regina Braga, Federal University of Juiz de Fora, Brazil
Marcos Borges, Federal University of Rio de Janeiro, Brazil
Fernanda Campos, Federal University of Juiz de Fora, Brazil

"A Hub-and-Spoke Model for Tool Integration in Distributed Development" (short paper)
Fabio Calefato and Filippo Lanubile
University of Bari, Italy

"An Approach for Enabling Effective and Systematic Software Reuse in a Globally Distributed Software Engineering Team using a Lean Development Methodology" (Industry paper)
Roopa Mandi, Siemens Technology and Services Pvt. Ltd., India
V. S. Mani, Siemens Technology and Services Pvt. Ltd., India
Stefan Halwas, Siemens AG, Germany

"Using architectural constraints to drive software component reuse while adding and enhancing features" (Industry paper)
Susmita Vaikar, Siemens Technology and Services Pvt. Ltd., India
Madan Mohan Jha, Siemens Technology and Services Pvt. Ltd., India
Felix Brunner, Siemens Schweiz AG, Switzerland

Session 5: Models, Definitions, Frameworks, and Taxonomies

Friday, 9:00 - 10:00 | ROOM 6011
Chair: Fabio Calefato, University of Bari, Italy

"Global Software Engineering – Evolution and Trends"
Christof Ebert, Vector Consulting Services, Germany
Marco Kuhrmann, University of Southern Denmark, Denmark
Rafael Prikladnicki, Pontifícia Universidade Católica do Rio Grande do Sul (PUCRS), Porto Alegre, Brazil

"A Specialized Global Software Engineering Taxonomy for Effort Estimation"
Ricardo Britto, Emilia Mendes, Claes Wohlin
Blekinge Institute of Technology, Sweden

"Communication in Distributed Software Development: A Preliminary Maturity Model" (short paper)
Ivaldir Farias Junior, UFPE Recife, Brazil
Sabrina Marczak, PUCRS Porto Alegre, Brazil
Rodrigo Santos, UFRJ Rio de Janeiro, Brazil
Hermano Moura, UFPE Recife, Brazil

"Shared knowledge in virtual teams: A preliminary framework" (short paper)
Tor Erlend Fægri, SINTEF ICT, Norway
Nils Brede Moe, University of Oslo, Norway
Viktoria Gulliksen Stray, SINTEF ICT, Norway

"A Global Teaming Model for Global Software Development Governance: A Case Study"
John Noll, Lero, the Irish Software Engineering Research Centre, University of Limerick, Ireland
Sarah Beecham, Lero, the Irish Software Engineering Research Centre, University of Limerick, Ireland
Ita Richardson, Lero, the Irish Software Engineering Research Centre, University of Limerick, Ireland
Clodagh Nic Canna, Ocuco Ltd., Ireland

POSTERS

"MONO: A Computer-Supported Cooperative Tool for Digital Content Software Projects"
Dario Correal, Oscar González, Manuel Camargo, Gilberto Pedraza
Universidad de Los Andes, Colombia

"Understanding architectural knowledge sharing in AGSD teams: An empirical study"
Gilberto Borrego, Universidad Autónoma de Baja California, México
Alberto L. Morán, Universidad Autónoma de Baja California, México
Ramón Palacio, Instituto Tecnológico de Sonora, México
Oscar M. Rodríguez, Instituto Tecnológico de Hermosillo, México

"Scrumconix: Agile and documented method to AGSD"
Luis T. Portela, Universidad Tecnológica del Sur de Sonora, México
Gilberto Borrego, Universidad Autónoma de Baja California, México

Short papers and Doctoral Symposium students are also invited to show posters at the poster session on Thursday.

SOCIAL EVENTS

Welcome Reception | 5:30 - 6:30, 6th floor patio
A light reception will be held at the end of the day on Tuesday, August 2 at UC Irvine.

Banquet Dinner | 7:00 - 9:30, Newport Dunes
Full conference registrants are invited to a Banquet Dinner at Newport Dunes on Wednesday, August 3. Newport Dunes is located on Newport Bay and is adjacent to the Hyatt Regency Hotel - you can walk to the dinner in just a few minutes. Dinner will be held in the Bayview Room.

Poster Session | 5:30 - 6:45, Room 6011 and 6th floor patio
A poster session and light reception will be held on Thursday, August 4.

Visit Google Irvine | 2:00 - 4:00
On Friday afternoon, August 5, we will be treated to a tour of Google Irvine. A shuttle bus will take you from UC Irvine to Google, and then back to the conference hotel.

facebook.com/ICGSEconference

twitter.com/ICGSE

linkedin.com/groups/2916097

Newport Dunes with Hyatt Regency Newport on left.

TUESDAY	TIME	ROOM 6011	ROOM 5011	ROOM 4011
	9:00 - 10:30	Workshop GSE-Ed'16: Inaugural Workshop on Global Software Engineering Education	Workshop PARIS: Methods and Tools for Project/Architecture/Risk Management in Globally Distributed Software Development Projects	
	11:00 - 12:30	GSE-Ed - Session II	PARIS - Session II	
	LUNCH, 6011 FOYER			
	2:00 - 3:30	GSE-Ed - Session III	Tutorial T1 - Scaling Agile to Large Globally Distributed Organizations	Tutorial T2 - What did you say? Mindful (Intercultural) Communication for Successful Projects
	4:00 - 5:30	GSE-Ed - Session IV	T1 - Session II	T2 - Session II
	5:30 - 6:30	Welcome Reception on 6th floor patio		

WEDNESDAY	TIME	ROOM 6011	ROOM 5011	ROOM 4011
	9:00 - 10:30	Tutorial T3 - Issues, Challenges, and Opportunities in Open Source Software Development for Global Software Engineering	Tutorial T4 - Distributed Development – Lessons from Industry	Doctoral Symposium
	11:00 - 12:30	T3 - Session II	T4 - Session II	Doctoral Symposium
	LUNCH, 6011 FOYER			
	2:00 - 3:45	Plenary and Keynote Session: Sanjay Shirolé "A New Vision of Innovation"		
	4:15 - 5:45	Conference Session 1 People, Teams, and Organizations		
	7:00 - 9:30	Banquet Dinner at Newport Dunes		

THURSDAY	TIME	ROOM 6011
	9:00 - 10:30	Plenary and Keynote Session: Margaret-Anne Storey "To Bot or Not: How Bots Can Support Collaboration in Software Development"
	11:00 - 12:30	Conference Session 2 Collaboration and Crowdsourcing
	LUNCH, 6011 FOYER	
	2:00 - 3:30	Conference Session 3 Process Improvement and Agility
	4:00 - 5:30	Conference Session 4 Architecture and System Development
	5:30 - 6:45	Poster Session and Reception

FRIDAY	TIME	ROOM 6011
	9:00 - 10:30	Conference Session 5 Models, Definitions, Frameworks, and Taxonomies
	11:00 - 12:30	Plenary and Keynote Session: Andrew Begel "The ABCs of Software Engineering: Affect, Biometrics, and Cognition"
	LUNCH, 6011 FOYER	
	2:00 - 4:00	Visit Google Irvine