# Table of Contents

Welcome ................................................................................................................................. ix  
Executive Committee Biographies ........................................................................................ xi  
Conference Organizers .......................................................................................................... xvi  
Program Committee Members ............................................................................................ xvii  
Keynote Talks ....................................................................................................................... xviii

## Research Papers I: GSE Management

Global Software Development Challenges: A Case Study on Temporal, Geographical  
and Socio-cultural Distance ................................................................................................... 3  

*Helena Holmstrom, Eoin O’Conchuir, Pär Ågerfalk, and Brian Fitzgerald*

Outsourcing Decisions and Models – Some Practical Considerations  
for Large Organizations .......................................................................................................... 12  

*Justin Stark, Mario Arlt, and Derek H. T. Walker*

A Reference Model for Global Software Development: Findings from a Case Study  
........................................................................................................................................ 18  

*Rafael Prikладnicki, Jorge Luis Nicolas Audy, and Roberto Evaristo*

## PANEL

**Road Blocks and Enablers for Global Software Engineering Projects**  
29  

*Christof Ebert, Alcatel*

## Research Papers II: Managing Global Software Development Teams

Project Management within Virtual Software Teams ............................................................... 33  

*Valentine Casey and Ita Richardson*

Comparison of Selected Survey Instruments for Software Team Communication Research  
................................................................................................................................. 43  

*Raghava G. Gowda and Donald J. Polzella*
Short Papers I: Managing Global Software Development Teams

Cultural Differences in Temporal Perceptions and its Application to Running Efficient Global Software Teams.................................................................55
Richard W. Egan, Marilyn Tremaine, Jerry Fjermestad, Allen Milewski, and Patrick O’Sullivan

Delegation in Virtual Team: the Moderating Effects of Team Maturity and Team Distance .................................................................62
Suling Zhang, Marilyn Tremaine, Jerry Fjermestad, Allen Milewski, and Patrick O’Sullivan

PANEL
Requirements Engineering in Distributed Projects.............................. 69
Daniela Damian
University of Victoria, Canada

Industry Papers I: GSE Management

Success of Offshore Relationships: Engineering team structures .................................................................73
Sidharth Narayanan, Sumonta Mazumder, and Raju R

Managing Software Performance in the Globally Distributed Software Development Paradigm.................................................................83
Gaurav Caprihan

IT Application Aessment Model for Global Software Development.................................................................92
Ravishankar Kunj and Navneet Bhushan

Short Papers II: Culture

Culture and Shared Understanding in Distributed Requirements Engineering .................................................................101
Yvonne Hsieh

Short Papers III: GSE Methodologies

Could Global Software Development Benefit from Agile Methods? .................................................................109
Maria Paasivaara and Casper Lassenius

Collaborative International Usability Testing: Moving from Document-Based Reporting to Information Object Sharing.................................................................114
Ian Douglas

Collaborative Software Engineering with a Digital Ecosystem .................................................................119
Thomas Heistracher, Thomas Kurz, Giulio Marcon, and Claudius Masuch
Short Papers IV: Technology

Towards Awareness in the Large........................................................................................................127
   Anita Sarma and Andre van der Hoek

MasePlanner: A Card-Based Distributed Planning Tool for Agile Teams........................................132
   Robert Morgan and Frank Maurer

Research Papers III: Coordination

Sysiphus: Enabling Informal Coordination in Global Software Development.................................139
   Bernd Brugge, Allen H. Dutoit, and Timo Wolf

Leveraging Expertise in Global Software teams: Going outside Boundaries......................................149
   Kate Ehrlich and Klarissa Chang

Exploring the Assumed Benefits of Global Software Development..................................................159
   Eoin O Conchuir, Helena Holmstrom, Per Ågerfalk, and Brian Fitzgerald

Industry Papers II: Test Infrastructure

   Brahim Sakout Andaloussi and Andreas Braun

Experience Developing Software Using a Globally Distributed Workforce ..................................179
   Alberto Avritzer, Thomas Ostrand, and Elaine J. Weynuker

Tool Support for Distributed Software Engineering............................................................................187
   Hans Spanjers, Maarten ter Huurne, Dan Bendas, Bas Graaf, Marco Lormans,
   and Rini Van Solingen

PANEL
Coping with Cultural Diversity in GSE Environments................................................................. 199
   Alberto Avritzer
   Siemens Corporate Research, Inc.

Research Papers IV: Technology

Siemens Global Studio Project: Experiences Adopting an Integrated GSD Infrastructure................203
   Neel Mullick, Matthew Bass, Zak El Houla, Daniel J. Paulish, Marcelo Cataldo,
   Jim D. Herbsleb, Len Bass, and Ragvinder Sangwan

Supporting Distributed Software Development with Fine-Grained Artefact Management................213
   Bernd Bruegge, Andrea De Lucia, Fausto Fasano, and Genoveffa Tortora

Technology Selection to Improve Global Collaboration .................................................................223
   Gabriela N. Aranda, Aurora Vizcalmo, Alejandra Cecchich, and Mario Piattoni
Posters

Toward a Unified Model for Requirements Engineering ................................................................. 237
Brian Berenbach and Mark Gall

Leveraging Lessons Learned for Distributed Projects Through Communities of Practice ................................................................. 239
Mauricio Cristal and Juliano Reis

Architecture-Centric Global Software Processes ................................................................. 241
Henrique Rocha de Faria and Gary Adler

Exploring the Relationship between Dependencies and Coordination to Support Global Software Development Projects ................................................................. 243
Sebastião B. Fonseca, Celidson R. B. de Souza, and David F. Redmiles

Practices and Supporting Structures for Mature Inquiry Culture in Distributed Software Development Projects ................................................................. 245
Vesna Mikulovic, Michael Heiss, and James D. Herbsleb

The Test Community of Practice Experience in Brazil ................................................................. 247
Elizângela Andrade Paiva

Global Software Development Offshore Insourcing Organizations Characteristics: Lessons Learned from a Case Study ................................................................. 249
Leonardo Pilatti and Jorge Luis Nicolas Audy

MuNDDoS: A Research Group on Global Software Development ................................................................. 251
Rafael Prikladnicki, Sabrina Marczak, and Jorge Luis Nicolas Audy

Improving Productivity of Local Software Development Teams in a Global Software Development Environment ................................................................. 253
Marcelo Blois Ribeiro, Ricardo M. Czekster, and Thais Webber

IMART: An Interoperability Model for Artifacts of Distributed Software Development Environments ................................................................. 255
Igor Scaliente Wiese and Elisa Hatsue Moriya Huzita

TDE UML Editor – A Success Development Case of a Software Extension ................................................................. 257
Daniel D. Vanzin, Ivan L. Martins, and João Bosco A. Pereira Filho

IBM Software Development Leveraging Geographically Distributed Teams -The Interactive Solution Marketplace 2.0 (ISM) Case Study ................................................................. 259
Vito Vitale

Author Index .................................................................................................................................. 261