**Program at a Glance**

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**Thank You to Our Symposium Sponsors**
Sunday, September 18

Starts at 9:15
GRADUATE CONSORTIUM: EXPANDING END USER CONTROL IN SOCIO-TECHNICAL SYSTEMS
Carnegie Mellon University

19:30 – 22:00 Opening Reception with Light Refreshments
Sheraton Station Square, Fountainview Room

All main conference sessions in Sheraton Station Square, Grand Station Ballroom 3 & 4.

Monday, September 19

8:00 – 9:00 Registration and Continental Breakfast

9:00 – 9:10 Conference Opening
Brad Myers · Carnegie Mellon University, USA

9:10 – 10:30 Successful Visual and End-User Programming Systems · PANEL
MODERATOR Brad Myers · Carnegie Mellon University, USA
PANELISTS Ofer Brandes — Tersus Visual Programming Platform
CEO, Tersus Software
Allen Cypher — CoScripter
Research Scientist, IBM Research – Almaden
Andrew P. Dove — LabVIEW
Principal Architect, National Instruments Corporation
Peter Lucas — CPoF and Visage
Principal, MAYA Design
Alexander Repenning — AgentSheets
CTO, AgentSheets and Professor, University of Colorado Boulder
Walter van Roggen — Sanscript and GoDiagram
Vice President, Northwoods Software

11:00 – 12:30 VISUAL DOMAIN-SPECIFIC LANGUAGES
SESSION CHAIR Paolo Bottoni · Sapienza – Università di Roma, Italy

Obstacles and opportunities with using visual and domain-specific languages in scientific programming · PAPER
Michael Jones · Oregon State University, USA
Christopher Scaffidi · Oregon State University, USA

Quick fix generation for DSMLs · PAPER
Ruru: A spatial and interactive visual programming language for novice robot programming · PAPER
James Diprose · University of Auckland, New Zealand
Bruce Macdonald · University of Auckland, New Zealand
John Hosking · University of Auckland, New Zealand

An Exploration of Design Opportunities for “Gardening” End-User Programmers’ Ideas · PAPER
Jill Cao · Oregon State University, USA
Scott D. Fleming · Oregon State University, USA
Margaret Burnett · Oregon State University, USA

Scenario Markup Language for Authoring Behavioral Driver Studies in 3D Virtual Worlds · SHORT PAPER
Kugamoorthy Gajananan · Graduate University for Advanced Studies, Japan
Arturo Nakasone · Graduate University for Advanced Studies, Japan
Helmut Prendinger · Graduate University for Advanced Studies, Japan
Marc Miska · Queensland University of Technology, Australia

Mini-Crowdsourcing End-User Assessment of Intelligent Assistants: A Cost-Benefit Study · PAPER
Amber Shinsel · Oregon State University, USA
Todd Kulesza · Oregon State University, USA
Margaret Burnett · Oregon State University, USA
William Curran · Oregon State University, USA
Alex Groce · Oregon State University, USA
Simone Stumpf · City University London, UK
Weng-Keen Wong · Oregon State University, USA

An Investigation of Non-Programmers’ Performance with Tools to Support Output Localization · SHORT PAPER
Paul Gross · Washington University in St. Louis, USA
Jennifer Yang · University of Washington, USA
Caitlin Kelleher · Washington University in St. Louis, USA

Automatic Diagram Layout Support for the Marama Meta-toolset · SHORT PAPER
Pei Shan Yap · University of Auckland, New Zealand
Examining Interaction with General-Purpose Object Recognition in LEGO OASIS · SHORT PAPER
Ryder Ziola · University of Washington, USA
Shweta Grampurohit · University of Washington, USA
Nate Landes · University of Washington, USA
James Fogarty · University of Washington, USA
Beverly Harrison · Intel Labs Seattle, USA

History Repeats Itself More Easily When You Log It: Versioning for Mashups · SHORT PAPER
Sandeep Kuttal · University of Nebraska – Lincoln, USA
Anita Sarma · University of Nebraska – Lincoln, USA
Gregg Rothermel · University of Nebraska – Lincoln, USA

17:15–18:00 Overview of All Posters and Demonstrations
19:00–22:00 POSTERS AND DEMONSTRATIONS DINNER RECEPTION
Reception at Carnegie Mellon University
**Tuesday, September 20**

8:30–9:00  **Registration and Continental Breakfast**

9:00–10:30  **Computational Thinking** · KEYNOTE
Jeanette M. Wing · Carnegie Mellon University, USA

11:00–12:30  **VISUAL LANGUAGES AND THEORY**
SESSION CHAIR Mark Minas · Universität der Bundeswehr München, Germany

**SketchSet: Creating Euler Diagrams using Pen or Mouse** · PAPER
Mengdi Wang · University of Auckland, New Zealand
Beryl Plimmer · University of Auckland, New Zealand
Paul Schmieder · University of Auckland, New Zealand
Gem Stapleton · University of Brighton, UK
Peter Rodgers · University of Kent, UK
Aidan Delaney · University of Brighton, UK

**Identifying Attachment Areas on Sketched Symbols** · SHORT PAPER
Gennaro Costagliola · University of Salerno, Italy
Mattia De Rosa · University of Salerno, Italy
Vittorio Fuccella · University of Salerno, Italy

**Deriving Sound Inference Rules for Concept Diagrams** · PAPER
Peter Chapman · University of Brighton, UK
Gem Stapleton · University of Brighton, UK
John Howse · University of Brighton, UK
Ian Oliver · Nokia Research, Finland

**Policy Specifications with Timed Spider Diagrams** · SHORT PAPER
Paolo Bottoni · Sapienza – Università di Roma, Italy
Andrew Fish · University of Brighton, UK

14:30–16:00  **DEBUGGING AND PROGRAM UNDERSTANDING**
SESSION CHAIR Martin Erwig · Oregon State University, USA

**Coping with Duplicate Bug Reports in Free/Open Source Software Projects** · PAPER
Jennifer Davidson · Oregon State University, USA
Nitin Mohan · Oregon State University, USA
Carlos Jensen · Oregon State University, USA

**Modeling Programmer Navigation: A head-to-head empirical evaluation of predictive models** · PAPER
David Piorkowski · Oregon State University, USA
Scott D. Fleming · Oregon State University, USA
Visualizing Call Graphs · PAPER
Thomas LaToza · Carnegie Mellon University, USA
Brad Myers · Carnegie Mellon University, USA

16:30–18:00 PROGRAM UNDERSTANDING
SESSION CHAIR Margaret Burnett · Oregon State University, USA

Enabling Program Comprehension through a Visual Object-focused Development Environment · PAPER
Fernando Olivero · University of Lugano, Switzerland
Michele Lanza · University of Lugano, Switzerland
Marco D’Ambros · University of Lugano, Switzerland
Romain Robbes · University of Chile, Chile

On the Impact of Layout Quality to Understanding UML Diagrams · PAPER
Harald Störrle · Technical University of Denmark, Denmark

 ifndef Confirmed Harmful: Promoting Understandable Software Variation · PAPER
Duc Le · Oregon State University, USA
Eric Walkingshaw · Oregon State University, USA
Martin Erwig · Oregon State University, USA

19:00–23:00 Grand Reception at the National Aviary
Wednesday, September 21

8:30 – 9:00  Registration and Continental Breakfast

9:00 – 10:30  The Keys to Solving the World’s Top Engineering Challenges  · KEYNOTE
Brian H. Powell · National Instruments Corporation, USA

11:00 – 12:30  SOFTWARE DEVELOPMENT AND USABILITY
SESSION CHAIR John Grundy · Swinburne University of Technology, Australia

Improving Usability of Interactive Graphics Specification and Implementation with Picking Views and Inverse Transformations  · PAPER
Stéphane Conversy · ENAC-LII, IRIT-ICS and Université de Toulouse, France

Why do Programmers Make Security Errors?  · SHORT PAPER
Jing Xie · University of North Carolina at Charlotte, USA
Heather Lipford · University of North Carolina at Charlotte, USA
Bei-Tseng Chu · University of North Carolina at Charlotte, USA

Restructuring Software with Gestures  · PAPER
Emerson Murphy-Hill · North Carolina State University, USA
Moin Ayazifar · North Carolina State University, USA
Andrew Black · Portland State University, USA

The Role of Conceptual Knowledge in API Usability  · SHORT PAPER
Andrew Ko · University of Washington, USA
Yann Riche · Microsoft Corporation, USA

14:30 – 16:00  MODELS
SESSION CHAIR Gem Stapleton · University of Brighton, UK

Embedding and Evolution of Spreadsheet Models in Spreadsheet Systems  · PAPER
Jácome Cunha · Universidade do Minho, Portugal
Jorge Mendes · Universidade do Minho, Portugal
João Saraiva · Universidade do Minho, Portugal
João Paulo Fernandes · Universidade do Minho and Universidade do Porto, Portugal

Allowing End-users to Participate within Model-Driven Development Approaches  · SHORT PAPER
Francisca Pérez · Universitat Politècnica de València, Spain
Pedro Valderas · Universitat Politècnica de València, Spain
Joan Fons · Universitat Politècnica de València, Spain

Future Trace: Making Programming more Conversational  · SHORT PAPER
Expressing Model Constraints Visually with VMQL · PAPER
Harald Större · Technical University of Denmark, Denmark

16:30–17:45 DIAGRAMS AND VISUALIZATION
SESSION CHAIR Andrew Fish · University of Brighton, UK

Progressor: Personalized visual access to programming problems · SHORT PAPER
Fedor Bakalov · Friedrich Schiller University of Jena, Germany
I-Han Hsiao · University of Pittsburgh, USA
Peter Brusilovsky · University of Pittsburgh, USA
Birgitta König-Ries · Friedrich Schiller University of Jena, Germany

Automatically Drawing Euler Diagrams with Circles and Ellipses · SHORT PAPER
Gem Stapleton · University of Brighton, UK
Peter Rodgers · University of Kent, UK

Aesthetic of Angular Resolution for Node-Link Diagrams: Validation and Algorithm · SHORT PAPER
Weidong Huang · University of Technology and CSIRO ICT Centre, Australia
Maolin Huang · University of Technology, Australia
Chun-Cheng Lin · National Chiao Tung University, Taiwan

Evaluating Visual and Statistical Exploration of Scientific Literature Networks · PAPER
Robert Gove · University of Maryland, USA
Cody Dunne · University of Maryland, USA
Ben Shneiderman · University of Maryland, USA
Judith Klavans · University of Maryland, USA
Bonnie Dorr · University of Maryland, USA

17:45–18:00 Conference Closing and VL/HCC 2012 Introduction
Brad Myers · Carnegie Mellon University, USA
Gennaro Costagliola · University of Salerno, Italy

Thursday, September 22

All day Post-conference EUSES Workshop
Posters and Demonstrations Dinner Reception
Monday, September 19, 2011, 7:00pm

Location: Newell-Simon Hall Atrium – Carnegie Mellon University

A shuttle bus will run continuously from 6:15pm until 10:00pm between the Sheraton Station Square and the Posters and Demonstrations Dinner Reception location, which is the Atrium of Newell-Simon Hall (NSH) on the Carnegie Mellon University Campus. If you want to drive, you can park for free at CMU in the Morewood Parking Lot, which is approximately at 4900 Forbes Avenue, 15213. The included campus map shows the parking lot and NSH.

Atrium Map
Presentations are ordered as listed below and arranged clockwise in the atrium starting on your left as you enter through the doors.

**Corporate Sponsor Demos**

**Tersus Visual Programming Platform**
Ofer Brandes · Tersus Software, Israel

**Debugger Canvas**
Rob DeLine · Microsoft Research, USA

**Rapid Prototyping of Mobile Applications for Augmented Reality Interactions**
Michele Di Capua · Unlimited Software, Italy
Gennaro Costagliola · University of Salerno, Italy
Mattia De Rosa · University of Salerno, Italy
Vittorio Fuccella · University of Salerno, Italy

**Rapid Deployment of Graphical and Textual Code to Real-Time Targets**
Andrew P. Dove · National Instruments, USA

**Other Corporate Demos**

**GameSalad: Bringing Game Creation to Everyone**
Michael Agustin · GameSalad, USA

**Demos**

**Visual Programming and Music Score Generation with OpenMusic**
Jean Bresson · STMS: IRCAM-CNRS-UPMC, France
Carlos Agon · STMS: IRCAM-CNRS-UPMC, France

**Breviz: Spreadsheet Visualization and Quality Analysis**
Felienne Hermans · Delft University of Technology, Netherlands

**Scripting a Radically-Distributed World**
Peter Lucas · MAYA Design, USA
Jeff Senn · MAYA Design, USA
Magesh Balasubramana · MAYA Design, USA
Stuart Roth · MAYA Design, USA
Steve Spencer · MAYA Design, USA
Inflo: End-user Visual Computation Supporting Sharing & Reuse
Jonathan Lung · University of Toronto, Canada
Steve Easterbrook · University of Toronto, Canada

Active Code Completion
Cyrus Omar · Carnegie Mellon University, USA
YoungSeok Yoon · Carnegie Mellon University, USA
Thomas D. LaToza · Carnegie Mellon University, USA
Brad A. Myers · Carnegie Mellon University, USA

Conversational Programming in Action
Alexander Repenning · AgentSheets and University of Colorado Boulder, USA

Programming in Pictures within Filmification Modeling Environment
Yutaka Watanobe · University of Aizu, Japan
Rentaro Yoshioka · University of Aizu, Japan
Nikolay Mirenkov · University of Aizu, Japan

Full Paper Demos

HaExcel: A Model-based Spreadsheet Evolution System
Jácome Cunha · Universidade do Minho, Portugal
João Paulo Fernandes · Universidade do Minho and Universidade do Porto, Portugal
Jorge Mendes · Universidade do Minho, Portugal
João Saraiva · Universidade do Minho, Portugal

Coping with Duplicate Bug Reports in Free/Open Source Software Projects
Jennifer Davidson · Oregon State University, USA
Nitin Mohan · Oregon State University, USA
Carlos Jensen · Oregon State University, USA

Ruru
James Diprose · University of Auckland, New Zealand

Evaluating Visual and Statistical Exploration of Scientific Literature Networks
Robert Gove · University of Maryland, USA

Quick fix generation for DSMLs
Ábel Hegedüs · Budapest University of Technology and Economics, Hungary
Ákos Horváth · Budapest University of Technology and Economics, Hungary
Istvan Rath · Budapest University of Technology and Economics, Hungary
Moises C. Branco · University of Waterloo, Canada
Daniel Varro · University of Waterloo, Canada

Progressor
I-Han Hsiao · University of Pittsburgh, USA
Pipes Plumber
Sandeep Kuttal · University of Nebraska – Lincoln, USA

Visualizing Call Graphs
Thomas D. LaToza · Carnegie Mellon University, USA

Gaucho
Fernando Olivero · University of Lugano, Switzerland

WYSIWYT/ML
Amber Shinsel · Oregon State University, USA

SketchSet: Creating Euler Diagrams using Pen or Mouse
Mengdi Wang · University of Auckland, New Zealand
Beryl Plimmer · University of Auckland, New Zealand
Paul Schmieder · University of Auckland, New Zealand
Gem Stapleton · University of Brighton, UK
Peter Rodgers · University of Kent, UK
Aidan Delaney · University of Brighton, UK

Posters

Can Learning Acquisition Be Computed?
Vicki Bennett · University of Colorado Boulder, USA
Kyu Han Koh · University of Colorado Boulder, USA
Alexander Repenning · AgentSheets and University of Colorado Boulder, USA

REST based Service Composition: Exemplified in a Care Network Scenario
Erik Grönvall · Aarhus University, Denmark
Mads Ingstrup · Aarhus University, Denmark
Morten Pløger · Aarhus University, Denmark
Morten Rasmussen · Aarhus University, Denmark

Tabular Form Editing with a Hexadecimal Grid Graph Model
Shinji Koka · Nihon University, Japan
Koichi Anada · Waseda University, Japan
Kenshi Nomaki · Nihon University, Japan
Takeo Yaku · Nihon University, Japan

Beyond Autocomplete: Automatic Function Definition
Kyle I. Murray · University of Rochester, USA
Jeffrey P. Bigham · University of Rochester, USA

Impure: a Visual Programming Language for the Data Age
Santiago Ortiz · Bestario, Spain
Victor Pascual Cid · Bestario, Spain
A Graph Grammar Model for Syntaxes of Financial Statements
Yuki Shindo · Nihon University, Japan
Koichi Anada · Waseda University, Japan
Koushi Anzai · Kanto Gakuen University, Japan
Shinji Koka · Nihon University, Japan

Row Manipulation in the Heterogenous Tabular Forms with an Octal Grid Model
Takeo Yaku · Nihon University, Japan
Koichi Anada · Waseda University, Japan
Shinji Koka · Nihon University, Japan
Yuki Shindo · Nihon University, Japan
Kensei Tsuchida · Toyo University, Japan

Doctoral Consortium Posters

“Gardening” End-User Programmers’ Ideas
Jill Cao · Oregon State University, USA

End User Robot Programming via Visual Languages
James Diprose · University of Auckland, New Zealand

Computing Indicators of Creativity
Kyu Han Koh · University of Colorado Boulder, USA

Support for Software Variation Editing
Duc Le · Oregon State University, USA

ClassSheet-driven Spreadsheet Environments
Jorge Mendes · Universidade do Minho, Portugal

Injecting Computational Thinking into Career Explorations for Middle School Girls
Heidi Webb · Pennsylvania State University, USA

Measuring Flow in Programming Education
Mark Zarb · University of Dundee, UK