

Program at a Glance

	Sunday 9/18	Monday 9/19	Tuesday 9/20	Wednesday 9/21	Thursday 9/22
Early Morning	Graduate Consortium	Successful Visual End- User Programming Systems	Keynote – Jeanette Wing	Keynote – Brian H. Powell	EUSES Workshop
Late Morning		Visual Domain- Specific Languages	Visual Languages & Theory	Software Development and Usability	
Early Afternoon		End-User Programming	Debugging & Program Understanding	Models	
Late Afternoon		Tools	Program Understanding	Diagrams and Visualization	
Evening	Opening Reception	Posters & Demos Dinner Reception	Grand Reception at National Aviary		

Thank You to Our Symposium Sponsors



















Sunday, September 18

Starts at GRADUATE CONSORTIUM: EXPANDING END USER CONTROL IN SOCIO-

9:15 **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

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

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

14:30-16:00 END-USER PROGRAMMING

SESSION CHAIR Mary Beth Rosson · Pennsylvania State University, USA

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

16:30-17:15 TOOLS

SESSION CHAIR Alexander Repenning · AgentSheets, University of Colorado Boulder, USA

Automatic Diagram Layout Support for the Marama Meta-toolset · SHORT PAPER Pei Shan Yap · *University of Auckland, New Zealand*

John Hosking · *University of Auckland, New Zealand*John Grundy · *Swinburne University of Technology, Australia*

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

Christopher Scaffidi · Oregon State University, USA

Liza John · Carnegie Mellon University, USA

Christopher Bogart · Oregon State University, USA

Bonnie E. John · *IBM Research – T.J. Watson and Carnegie Mellon University, USA*

Margaret Burnett · Oregon State University, USA Rachel Bellamy · IBM Research – T.J. Watson, 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

#ifdef 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

Alexander Repenning · AgentSheets and University of Colorado Boulder, USA

Expressing Model Constraints Visually with VMQL · PAPER

Harald Störrle · 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

Corporate Sponsor Demos

Full
Paper
Paper
Demos

Doctoral Consortium Posters

Posters



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 · Bestiario, 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

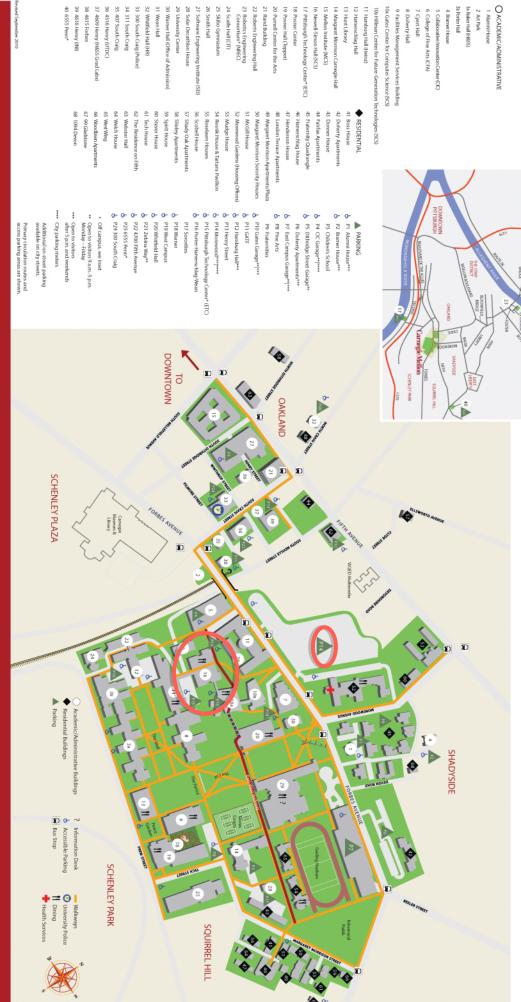
Jorge Mendes · Universidade do Minho, Portugal

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



Campus Map

Carnegie Mellon University v

www.cmu.edu