

Program

The Diagrams 2008 technical program includes three keynote talks, two tutorials, 28 paper presentations and 28 poster presentations.

The following is a draft program for Diagrams 2008 and is subject to change.

Friday, September 19

8:00 – 9:00

Registration

9:00 – 10:30

Session 1: Welcome and Keynote (joint with VL/HCC)

Chair: Mark Minas

Room: Großer Saal

Model Driven Development with Mechatronic UML
Professor Dr Wilhelm Schafer

10:30 – 11:00

Break

11:00 – 12:45

Session 2: Diagram Aesthetics and Layout (joint with VL/HCC)

Chair: Paolo Bottoni

Room: Großer Saal

General Euler Diagram Generation
Peter Rodgers, Leishi Zhang and Andrew Fish

Euler Diagram Decomposition
Andrew Fish and Jean Flower

Smooth Linear Approximation of Non-overlap Constraints
Graeme Gange, Peter Stuckey and Kim Marriott

Extremes are Better: Investigating Mental Map Preservation in Dynamic Graphs
Helen Purchase and Amanjit Samra

12:45 – 14:15

Lunch

14:15 – 15:30

Session 3: Modelling and Graphs (joint with VL/HCC)

Chair: John Hosking

Room: Großer Saal

Design-Time Simulation of Domain-Specific Models by Incremental Pattern Matching (short)
Istvan Rath, Dávid Vágó and Daniel Varro

Generic and Reflective Visual Specification of Modeling Guidelines with Graph Transformations

Carsten Amelunxen, Elodie Legros and Andy Schürr

A Model-Driven Approach for the Visual Specification of Role Based Access Control Policies in Web Systems

Paloma Diaz, Ignacio Aedo, Daniel Sanz and Alessio Malizia

The papers presented in this session are accepted for VL/HCC. Further information about the papers will be made available at the conference registration desk.

15:30 – 16:00

Break

16:00 – 17:30

Session 4: Psychological and Cognitive Issues

Chair: Stephanie Elzer Room: Seminarraum 3

An Eye-Tracking Study of Exploitations of Spatial Constraints in Diagrammatic Reasoning

Atsushi Shimojima and Yasuhiro Katagiri

What Diagrams Reveal about Representations in Linear Reasoning, and How they Help

Krista DeLeeuw and Mary Hegarty

What Can Pictorial Representations Reveal about the Cognitive Characteristics of Autism?

Maithilee Kunda and Ashok Goel

Visual Thinking with an Interactive Diagram (short)

Colin Ware, Anne Gilman and Robert Bobrow

18:30 – 20:30

Evening Reception and Poster Session

The posters will be presented in two slots during the reception which takes place in the conference centre Lobby. A list of accepted posters and details on the slot in which they will be presented can be found below.

Saturday, September 20

9:00 – 11:00

Session 5: Tutorial

Room: Großer Saal

Cognitive Dimensions of Notations: Understanding the Ergonomics of Diagram Use

Alan Blackwell

11:00 – 11:30

Break

11:30 – 13:00

Session 6: Tutorial

Room: Großer Saal

Getting Started With Sketch Tools: A Tutorial on Sketch Recognition Tools

Beryl Plimmer and Tracy Hammond

13:00 – 14:30

Lunch

14:30 – 15:45

Session 7: Keynote

Chair: Dave Barker-Plummer Room: Großer Saal

Heterogeneous Reasoning

Professor John Etchemendy

15:45 – 16:15

Break

16:15 – 17:35

Session 8: Applications of Diagrams

Chair: Richard Cox Room: Großer Saal

Strategy Roadmaps: New Forms, New Practices

Alan Blackwell, Rob Phaal, Martin Eppler and Nathan Crilly

VAST Improvements to Diagrammatic Scheduling using Representational Epistemic Interface Design

David Ranson and Peter Cheng

Enhancing State-Space Tree Diagrams for Collaborative Problem Solving (short)

Steven Tanimoto

Visual Programming with Interaction Net (short)

Abubaker Hassan, Ian Mackie and Jorge Sousa Pinto

18:30

Bus departs for Banquet

19:00

Conference Banquet

The banquet will take place at Muehlfelder Brauhaus and will include a brewery tour and beer tasting.

Sunday, September 21

9:00 – 11:00

Session 9: Theoretical Aspects

Chair: Nik Swoboda Room: Großer Saal

Spider diagrams of Order and a Hierarchy of Star-Free Regular Languages

Aidan Delaney, John Taylor and Simon Thompson

Diagrammatic Reasoning System with Euler Circles: Theory and Experiment Design

Koji Mineshima, Mitsuhiro Okada, Ryo Takemura and Yuri Sato

A Normal Form for Euler Diagrams with Shading

Andrew Fish, Chris John and John Taylor

Ensuring Generality in Formalizations of Euclid's Diagrammatic Arguments

John Mumma

Depicting Negation in Diagrammatic Logic: Legacy and Prospects (short)

Fabien Schang and Amirouche Moktefi

11:00 – 11:30

Break

11:30 – 12:45

Session 10: Keynote

Chair: Mary Hegarty

Room: Großer Saal

Rich Data Representation: Sophisticated Visual Techniques for Ease and Clarity

W. Bradford Paley

12:45 – 14:00

Lunch

14:00 – 15:30

Session 11: Diagrams in Education

Chair: Andrew Fish

Room: Großer Saal

Transforming Descriptions and Diagrams to Sketches in Information System Design

Barbara Tversky, James E. Corter, Jeffrey V. Nickerson, Doris Zahner and Yun Jin Rho

Graphical revelations: Comparing students' translation errors in graphics and logic (short)

Richard Cox, Robert Dale, John Etchemendy and Dave Barker-Plummer

Learning from animated diagrams: How are mental models built?

Richard Lowe and Jean-Michel Boucheix

Diagrams for the Masses: Raising public awareness - from Neurath to Gapminder and Google Earth

Raul Niño Zambrano and Yuri Engelhardt

15:30 – 15:50

Break

15:50 – 17:30

**Session 12: Understanding and Comprehension and Closing
Remarks**

Chair: Alan Blackwell Room: Großer Saal

Detection of Sample Differences from Dot Plot Displays
Lisa Best, Laurence Smith and D. Alan Stubbs

Visualizing Non-Subordination and Multidominance in Tree Diagrams:
Testing Five Syntax Tree Variants
Leonie M. Bosveld-de Smet and Mark de Vries

The Effects of Users' Background Diagram Knowledge and Task
Characteristics Upon Information Display Selection
Beate Grawemeyer and Richard Cox

Multimodal Comprehension of Graphics with Textual Annotations: The
Role of Graphical Means Relating Annotations and Graph Lines (short)
Cengiz Acarturk, Christopher Habel and Kursat Cagiltay

Poster Session 1: 18:30 – 19:00

Room: Lobby

Talk to the Hand: An Agenda for Further Research on Tactile Graphics
Frances Aldrich

Openproof - A Flexible Framework for Heterogeneous Reasoning
Dave Barker-Plummer Dave, John Etchemendy, Albert Liu, Michael Murray and Nik Swoboda

Cognitive and Semantic Perspectives of Token Representation in Diagrams
Rossano Barone and Peter Cheng

Estimating Effort for Trend Messages in Grouped Bar Charts
Richard Burns, Stephanie Elzer and Sandra Carberry

Types and Programs from Euler Diagrams
James Burton

Diagrams in the UK National School Curriculum
Grecia Garcia Garcia and Richard Cox

LePUS3: An Object-Oriented Design Description Language
Epameinondas Gasparis, Jonathan Nicholson and Amnon Eden

Utilizing Feature Diagrams to Assess the Capabilities of Tools that Support the Model Driven
Architecture
Benjamin Gorry

Diagrammatic knowledge-based tools for complex multi-dynamic processes

Ronald Grau and Peter Cheng

Supporting Reasoning and Problem-Solving in Mathematical Generalisation with Dependency Graphs

Sergio Gutierrez Santos, Darren Pearce, Eirini Geraniou and Manolis Mavrikis

A Concept Mapping Tool for Nursing Education

Norio Ishii and Saori Sakuma

Cognitive Methods for Visualizing Space, Time, and Agents

Angela Kessell and Barbara Tversky

Benefits of Constrained Interactivity in Using a Three-Dimensional Diagram

Peter Khooshabeh, Mary Hegarty and Madeleine Keehner

A Strategy for Drawing a Conceptual Neighborhood Diagram Schematically

Yohei Kurata

Poster Session 2: 19:00 – 19:30

Room: Lobby

Supporting relational processing in complex animated diagrams

Richard Lowe and Jean-Michel Boucheix

Animated Cladograms: Interpreting Evolution from Diagrams

Camillia Matuk

Automatic Diagram Drawing based on Natural Language Text Understanding

Anirban Mukherjee and Utpal Garain

Texts and graphs elaboration: the effect of graphs' examination on recall

Gisella Paoletti and Sara Rigutti

Diagrammatic Logic of Existential Graphs: A Case Study of Commands

Ahti-Veikko Pietarinen

Diagrammatic Reasoning in Separation Logic

M. Ridsdale, M. Jamnik, N. Benton and J. Berdine

Method of Minimal Representation: An alternative Diagrammatic technique for testing the validity of Categorical Syllogisms

Sumanta Sarathi Sharma

The Relationship between Graph Comprehension and Spatial Imagery: Support for an Integrative Theory of Graph Cognition

Brandie Stewart, Aren Hunter and Lisa Best

Using MusicXML to Evaluate Accuracy of OMR systems

Mariusz Szwoch

Aestheticization of flowcharts

Wioleta Szwoch

Towards Diagrammatic Patterns

Merete Skjelten Tveit

Visualizing Meaning: Literacy Materials for Dyslexic Children

Myra Thiessen

Diagrammatic Interrelationships Between Global and Local Algebraic Visual Objects:
Communicating the Visual Abstraction

Julie Tolmie

School Curriculum Development to Promote Student Spontaneous Diagram Use in Problem
Solving

Yuri Uesaka and Emmanuel Manalo