

Technology-Enhanced Diagrams Research

It is an understatement to say that technology has enabled methodological innovation in diagram and spatial reasoning research. New technologies offer opportunities for recording data through video screen recordings; spatial navigation in real and virtual realities, visual attention monitoring, diagram activity on graphics tablets, and recording body position and gestures via position sensors and accelerometers. Whilst the rich data that these techniques yield offer exciting potential for research innovation, researchers face new methodological challenges due to its sheer volume and the challenge of triangulating data from multi-sources.

The workshop will consist of tutorial presentations and paper submissions. Experienced diagrams researchers will share their knowledge and experiences of diagrams research using innovative technologies including haptic devices, interactive surfaces, eye trackers and virtual reality systems. Interactive sessions on the use of computer-based tools for synchronizing and analyzing multi-source data will be offered. Workshop participants will have an opportunity to explore and observe the methods in action and discuss their potential for methodological innovation.

PROGRAMME

	09:00-09:15	Registration		
	09:15-09:30	Opening session		Richard Cox
Workshop Session 1	09:30 -10:00	Oral Session 1	Processing static and dynamic diagrams: Insights from eye tracking	Richard Lowe and Jean-Michel Boucheix
	10:00-10:30	Oral Session 2	Eye Tracking in Multimodal Comprehension of Graphs	Cengiz Acarturk and Christopher Habel
	10:30-11:00	Q & A followed by Interactive Sessions		
	11:00-11:30	Morning Break		
Workshop Session 2	11:30-12:00	Oral Session 3	Eye-tracking and learning interactions from graphs and diagrams	Jonathan P. San Diego
	12:00-12:30	Oral Session 4	Comparison of Haptic and Non-Speech Audio Feedback	Cagatay Goncu and Kim Marriott
	12:30-13:00	Q & A followed by Interactive Sessions		
	13:00-14:15	Lunch		
Workshop Session 3	14:15-14:45	Oral Session 5	Design of a Virtual Reality System for the Study of Diagram Use in Organic Chemistry	Andrew Stull, Trevor Barrett and Mary Hegarty
	14:45-15:15	Oral Session 6	An infrared finger tracking system for graphing applications	Grecia Garcia Garcia and Richard Cox
	15:15-15:45	Q & A followed by Interactive Sessions		
	15:45-16:15	Afternoon Break		
	16:15-16:45	Open Forum	Discussion about the Oral sessions	
	16:45-17:15		Discussion about the Interactive sessions	
	17:15-17:30	Closing		

Download the programme of abstracts [here](#).

ORGANIZERS

[Richard Cox](#) (University of Edinburgh & Monash University)

[Jonathan P. San Diego](#) (King's College London)

PROGRAM COMMITTEE

[Andy Stull](#) (University of California Santa Barbara)

[Ric Lowe](#) (Curtin University)

[Kim Marriott](#) (Monash University)

[Dave Barker-Plummer](#) (Stanford University, USA)

[Paul Marshall](#) (University College London)

[Shamus Smith](#) (Durham University)

CALL FOR PAPERS IS NOW CLOSED

We call for paper submissions from colleagues on data capture and analysis topics including (but not limited to):

- Visual attention monitoring, e.g. eye tracking
- Haptic devices and feedback systems
- Interactive, multi-touch surface devices
- Rich (multi-source) data analysis
- Geospatial technologies
- Gesture recognition, body position sensing and measurement
- Graphical input recognition and parsing
- Mobile devices

Paper submissions may be in either of the following forms:

- full papers*, 15 pages - consisting of original research and surveys
- short papers*, 7 pages - consisting of systems descriptions, software demonstrations, and position statements.

Papers will be peer-reviewed by members of the workshop committee (plus some invited members of the Diagrams 2012 program committee).

The formatting style is LNCS. The necessary style files can be found [here](#). Submissions are now open.

Please submit via [EasyChair page for TEDR Workshop](#).

PROCEEDINGS

A preprint of the proceedings will be available at the workshop.

The proceedings will also be published by [CEUR](#) after the workshop.



IMPORTANT DATES

Abstract submission (full and short papers) Friday, March 30, 2012

Paper submission (full and short papers) Friday, April 6, 2012 (**EXTENDED to April 16, 2012**)

Notification Friday, May 4, 2012

Camera ready copy Friday, May 25, 2012

Early Registration deadline May 11th, 2012

Workshop Monday, July 2, 2012

All deadlines are at 11:59pm (23:59) UTC

CONTACT

If you have any questions, please contact the workshop organizers tedr2012@easychair.org

Tweeter hash tag: #TEDR2012

