

Special Issue on Visual Languages and Logic

Diagrams of one sort or another have always been used as aids to abstract reasoning. Although many are informal mnemonics, reminding their authors about structures and relationships they have observed or deduced, considerable research effort has been expended on formalising graphical notations so that they may play a more central role in the application of logic to problems.

While early work concentrated on diagrammatic representations of logic as a more intuitive or revealing paper-based replacement for textually represented logic, research in this area now mostly involves notations specifically designed for computer implementation either as computational models or interface languages. Examples include relational and existential graphs (C.S. Peirce), conceptual graphs (J.F. Sowa), various flavours of semantic networks such as conceptual dependency graphs (R. Schank), graphical deduction systems such as clause interconnectivity graphs (S. Sickel), Venn diagrams, Euler diagrams, constraint diagrams, and visual logic programming languages.

Following the success of the Workshop on Visual Languages and Logic held in 2007 and again in September 2009 (VLL 2009) (<http://torch.cs.dal.ca/~vll/>), we are soliciting, for a Special Issue of JVLC, papers in which the primary focus is research at the intersection of logic and visual languages. In particular, we invite VLL 2009 authors to submit updated and expanded versions of their papers. We expect this special issue to appear in late 2010 or early 2011. Topics of interest include, but are not limited to:

- Graphical notations for logics (either classical or non-classical, such as first or higher order logic, temporal logic, description logic, independence friendly logic, spatial logic)
- Diagrammatic reasoning
- Theorem proving
- Formalisation (syntax, semantics, reasoning rules)
- Expressiveness of visual logics
- Visual logic programming languages
- Visual specification languages
- Applications
- Tool support for visual logics

If you intend to submit a paper, please email a title, abstract and keywords to VLL@cs.dal.ca by November 30, 2009. This information will be used to assign referees in advance of the paper deadline.

Your paper should be emailed as a PDF to VLL@cs.dal.ca by January 31, 2010. Note that although PDF is not the required format for the final copies of accepted papers, it is the most convenient for reviewing.

If you have any questions about this Special Issue, please email VLL@cs.dal.ca.

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Guest Editors