

Curriculum Vitae

Harry Halpin

Business Address:

Yahoo! Reserach Barcelona!
Avinguda Diagonal 177, 8th Floor
08018 Barcelona
Catalunya (Spain)
email: hhalpin@w3.org

Degrees

Yahoo! Research Barcelona. Working with Peter Mika on entity-based search and crowd-sourcing.

W3C Team Employee. Chair of the *Social Web* Incubator Group, Staff Contact for *RDB2RDF* Working Group, Member of *Technology and Society* Domain. 2009-present. Hosted by University of Edinburgh. Supervisors: Tim Berners-Lee and Thomas Roessler.

Ph.D. in Informatics Dissertation: “Sense and Reference on the Web.”. 2009. Advisors: Andy Clark and Henry S. Thompson.

MSc. in Informatics with Honors. Major Specialism: Learning from Data. Minor Specialism: Natural Language Processing and Engineering. 2003. Thesis: “The Plots of Children and Machines: Statistical and Symbolic Analysis of Narrative Texts.” Advisor: Johanna Moore. University of Edinburgh. (Best MSc. Prize)

B.S. Mathematical Sciences (Computer Science) with Honors and Highest Distinction. Minor in Cognitive Science. 2001. Thesis: “Models of Topic Segmentation: Computational, Cognitive, and Behavioral.” Advisor: Peter C. Gordon University of North Carolina at Chapel Hill.

Research Interests

My research interests center on the science and philosophy of the Web, which consist of revealing the principles that allow the harnessing of collective intelligence using the technological scaffolding of the World Wide Web and wider Internet. This has manifested itself in dissertation on grounding the use of URIs on the Web in the philosophy of language (“From Wittgenstein to Search Engines” in *IEEE Internet Systems*). My current research hopes to attempts to synthesize insights from the philosophy of the mind in order to properly formulate a philosophy of the Web, by combining the “Extended Mind Hypothesis” of Andy Clark with the historical trajectory

of the Web, grounding the analysis in terms of individuation and grammaticalization. This work is summarized in “Towards a Philosophy of the Web: Representation, Enaction, Collective Intelligence” co-authored with Clark in the *Web Science 2010 Symposium*.

I am currently a W3C Team member based at Yahoo! Research Barcelona. I promote heavily the World Wide Web Consortium (W3C), the world’s leading Web standards body directed by the inventor of the Web Tim Berners-Lee and standardization body of HTML. In that role, I am in charge of co-ordinating the W3C’s upcoming work in social networking and media as chair of the Social Web Incubator Group, and work heavily on Semantic Web-related research with Oracle in the RDB2RDF Working Group. Currently I am the W3C lead on social media and identity in the Technology and Society Domain, working with browser vendors and institutions such as Facebook on creating an open social layer for the Web. I also am researching crowd-sourcing and the Social Web for Yahoo! Research, where I am a visiting scientist till end of March. My most cited paper is “The complex dynamics of collaborative tagging,” in the *World Wide Web Conference* where we showed for the first time the emergence of consensus in tagging systems using information-theoretic methods, work I am currently extending to create a unified theory of search, social networks, and real-time microblogging such as Twitter.

Publications

Papers

- Harry Halpin (forthcoming in 2010). **Sense and Reference on the Web**. In *Minds and Machines*.
- Harry Halpin and Victor Laverenko (forthcoming in 2010). **Creating a Virtuous Cycle Between Hypertext and Semantic Web Search: Frameworks and Evaluation**. In *Journal of Web Semantics*.
- Harry Halpin, Andy Clark, and Michael Wheeler (2010). **Towards a Philosophy of the Web: Representation, Enaction, Collective Intelligence**. In *Proceedings of the Web Science Symposium (WebSci10)*. Raleigh, USA.
- Harry Halpin and Patrick J. Hayes (2010). **When owl:sameAs isn’t the Same: An Analysis of Identity Links in Linked Data**. In *Proceedings of the Linked Data on the Web Workshop of the World Wide Web Conference (WWW 2005)*. Raleigh, USA.
- Harry Halpin and Valentina Presutti (2010). **An Ontology of Resources: Solving the Identity Crisis**. In *Proceedings of the European Semantic Web Conference*. Heraklion, Greece.
- Dirk Bollen and Harry Halpin(2009). **An Experimental Analysis of Suggestions in Collaborative Tagging..** In *Proceedings of Web Intelligence Conference*. Milan, Italy.

- Harry Halpin and Henry S. Thompson (2009). **From Wittgenstein to Search Engines**. In *IEEE Intelligent Systems*, 27-31.
- Harry Halpin (2009). **Is there anything worth finding on the Semantic Web?**. In *World Wide Web Conference (WWW 2009)*, Madrid, Spain.
- Harry Halpin, Valentin Robu, and Hana Shepard (2009) **The emergence of consensus and shared vocabularies in collaborative tagging systems**. In *ACM Transactions on the Web* 3(4): 1-34.
- Harry Halpin (2008). **Philosophical Engineering: Towards a Philosophy of the Web**. In *APA Newsletter on Philosophy and Computers* 7(2).
- Harry Halpin (2008). **La souverainet numérique**. In *Multitudes* (35). Translation by Yann Moulier-Boutang of presentation given in 2006 at *Immaterial Labour* conference at Cambridge, United Kingdom.
- Harry Halpin (2008). **Foundations of a Philosophy of Collective Intelligence**. In *Proceedings of the Conference on Artificial Intelligence and the Simulation of Behaviour (AISB 2008)*, Aberdeen, United Kingdom.
- Harry Halpin, David J. Zielinski, Rachael Brady and Glenda Kelly (2008). **Exploring Semantic Social Networks Using Virtual Reality**. In *Proceedings of the World Wide Web Conference (ISWC 2008)*. Karlsruhe, Germany.
- Patrick J. Hayes and Harry Halpin (2008). **In Defense of Ambiguity**. *Int. J. Semantic Web Inf. Syst.* 4(2): 1-18.
- Harry Halpin, Valentin Robu, and Hana Shepard (2007). **The complex dynamics of collaborative tagging**. In *Proceedings of the World Wide Web Conference (WWW 2007)*. Banff, Canada.
- Harry Halpin (2006). **From Typed-Functional Semantic Web Services to Proofs**. In *Proceedings of the International Semantic Web Conference (ISWC 2006)*. Athens, United States.
- Harry Halpin and Johanna Moore (2006). **Event Extraction in a Plot Advice Agent**. In *Proceedings of the Association for Computational Linguistics (ACL 2006)*, Sydney, Australia.
- Harry Halpin (2006). **Identity, Reference, Meaning, and the Web**. In *Proceedings of the Identity, Reference, and the Web Workshop (IRW2006) at the World Wide Web Conference (WWW 2006)*, Edinburgh, UK.
- Harry Halpin and Henry S. Thompson. (2006) **One Document to Bind Them: Combining XML, Web Services, and the Semantic Web**. In *Proceedings of the World Wide Web Conference (WWW 2006)*, Edinburgh, UK.

- Fiona McNeill, Harry Halpin, Ewan Klein, and Alan Bundy (2006) **Merging Stories with Shallow Semantics**. In *Knowledge Representation and Reasoning for Language Processing Workshop at the European Association for Computational Linguistics (EACL 2006) conference*.
- Harry Halpin and Henry S. Thompson. (2005) **Web Proper Names: Naming Referents on the Web**. In *Proceedings of Semantic Computing Workshop of the World Wide Web Conference (WWW 2005)*, Chiba Japan.
- Harry Halpin, Johanna D. Moore and Judy Robertson. (2004) **Automatic Analysis of Plot for Story Rewriting**. In *Proceedings of Empirical Methods in Natural Language Processing (EMNLP 2004)*, Barcelona, Spain.
- Claire Grover, Harry Halpin, Ewan Klein, Jochen L. Leidner and Richard Tobin. (2004) **A framework for text mining services**. In *Proceedings of the Third UK e-Science Programme All Hands Meeting (AHM 2004)*. Nottingham, UK.

Honors and Awards

- Eduserv Digital Identity Grant (2009-2010)
- DAAD Scholarship to Frei Universitat Berlin (2010)
- Dagstuhl Seminar on the Semantic Web: Reflections and Future Directions (2009)
- Microsoft 'Beyond Search' Award (2008)
- Dagstuhl Seminar on Social Web Communities (2008)
- Oxford Internet Institute Web Science Summer Program (2008)
- Dagstuhl Seminar on Social Web Communities (2008)
- Duke University Interface Seminar Fellowship @@ (2007)
- Santa Fe Institute Complex Systems Summer School (2006)
- European Summer School for Language, Logic, and Information (2005)
- Oversearch Research Scheme (ORS) Scholarship. (2003-2009)
- Best MSc. Thesis Prize. (2003) School of Informatics University of Edinburgh.
- St. Andrew's Society Scholarship (2002)
- American Friends of the University of Edinburgh Grant. (2002)
- Phi Beta Kappa. (2001)

Indiana University Summer Research Program. (1999) Cognitive Science Program, University of Indiana at Bloomington.

References

Andy Clark
Professor of Logic and Metaphysics
Philosophy Department
The University of Edinburgh
David Hume Tower
George Square
Edinburgh EH8 9JX
Scotland, United Kingdom
Email: Andy.Clark@ed.ac.uk
Phone: +44 (0) 131 650 3659

Henry S. Thompson
School of Informatics
The University of Edinburgh
2 Buccleuch Place
Edinburgh EH8 9LW
Scotland, United Kingdom
E-mail: ht@inf.ed.ac.uk
Phone: +44 (0) 131 650 4440

Tim Berners-Lee
Director of World Wide Web Consortium
Research Scientist, Computer Science and Artificial Intelligence Lab, MIT
32 Vassar Street
Cambridge, MA, 02139 USA
E-mail: timbl@w3.org
Phone: ++1 617-253 5702
Website: <http://www.w3.org/People/Berners-Lee/>