



The Web Science Research Initiative (WSRI) was originally set up as the result of a Memorandum of Understanding between MIT CSAIL and University of Southampton, ECS. The ambition was to coordinate and support the study of the decentralised information system that is the World Wide Web. Since the launch of this Initiative the concept of Web Science has been widely disseminated and is establishing itself as an important area of activity. WSRI's activities have focused on (i) articulating a research agenda for the broader scientific community, (ii) coordinating the development of Web Science educational material and curricula and (iii) engaging in thought leadership for this emerging field.

Berners-Lee, T., Hall, W., Hendler, J. A., O'Hara, K., Shadbolt, N. and Weitzner, D. J. (2006) A Framework for Web Science. Foundations and Trends in Web Science, 1 (1). pp. 1-130. 2006



This text sets out a series of approaches to the analysis and synthesis of the World Wide Web, and other web-like information structures. A comprehensive set of research questions is outlined, together with a sub-disciplinary breakdown, emphasising the multi-faceted nature of the Web, and the multi-disciplinary nature of its study and development. These questions and approaches together set out an agenda for Web Science, the science of decentralised information systems. Web Science is required both as a way to understand the Web, and as a way to focus its development on key communicational and representational requirements. The text surveys central engineering issues, such as the development of the Semantic Web, Web services and P2P. Analytic approaches to discover the Web's topology, or its graph-like structures, are examined. Finally, the Web as a technology is essentially socially embedded; therefore various issues and requirements for Web use and governance are also reviewed.

Berners-Lee, T., Hall, W., Hendler, J., Shadbolt, N. and Weitzner, D. (2006) Creating a Science of the Web. Science, 313 (5788). pp. 769-771. ISSN 0036-8075 2006



Understanding and fostering the growth of the World Wide Web, both in engineering and societal terms, will require the development of a new interdisciplinary field.

Southampton and MIT launch Web Science collaboration 2006



The University of Southampton and the Massachusetts Institute of Technology today announced the launch of a long-term research collaboration that aims to produce the fundamental scientific advances necessary to guide the future design and use of the World Wide Web.

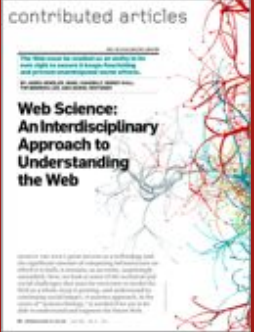
Commenting on the new initiative, Tim Berners-Lee, inventor of the World Wide Web and a founding director of WSRI, said, "As the Web celebrates its first decade of widespread use, we still know surprisingly little about how it evolved, and we have only scratched the surface of what could be realized with deeper scientific investigation into its design, operation and impact on society.

"The Web Science Research Initiative will allow researchers to take the Web seriously as an object of scientific inquiry, with the goal of helping to foster the Web's growth and fulfill its great potential as a powerful tool for humanity."

Networks for Web Science

The aim of Networks for Web Science was to bring together computer scientists and engineers, social scientists and policy makers to study complex decentralized information systems as personified by the Web, in such a way as to encompass science, engineering, social understanding and capacity building. The project was to establish networks of researchers from different technical and social science research disciplines to begin to develop a Web Science research agenda through the exchange of PhD students and collaborative workshops, and to disseminate, where appropriate, the results through detailed review papers.

Hendler, J., Shadbolt, N., Hall, W., Berners-Lee, T. and Weitzner, D. (2008) Web Science: An Interdisciplinary Approach to Understanding the Web. Communications of the ACM, 51 (7). pp. 60-69. ISSN 0001-0782 2008



Despite the Web's great success as a technology and the significant amount of computing infrastructure on which it is built, it remains, as an entity, surprisingly unstudied. Here, we look at some of the technical and social challenges that must be overcome to model the Web as a whole, keep it growing, and understand its continuing social impact. A systems approach, in the sense of systems biology, is needed if we are to be able to understand and engineer the future Web.

New Web Science Laboratory for Tsinghua and Southampton 2008



The Graduate School at Shenzhen, Tsinghua University, in China, and the University of Southampton have agreed to set up a joint laboratory focused on Web Science.

The signing ceremony of the Graduate School at Shenzhen, Tsinghua University- Southampton University Web Science Laboratory was held at the Graduate School at Shenzhen, Tsinghua University.

The Southampton delegation was led by the vice chancellor, Professor Bill Wakeham, accompanied by Professors Wendy Hall, Nigel Shadbolt and Lu Maozu. The opening ceremony culminated with the signing of the agreement between Tsinghua and Southampton universities by Professor Guan Zhicheng, Dean of the Graduate School, and the Vice-Chancellor of Southampton.

In his welcome speech, Professor Guan Zhicheng spoke about the similarities of the Graduate School and the University of Southampton and promised full cooperation. Professor Bill Wakeham enthusiastically addressed the ceremony and spoke of the changes happening in the city of Southampton and the achievement of its University.

O'Hara, K. and Hall, W. (2008) Trust on the Web: Some Web Science Research Challenges. UoC Papers: E-Journal on the Knowledge Society (7). 2008



Web Science is the interdisciplinary study of the World Wide Web as a first-order object in order to understand its relationship with the wider societies in which it is embedded, and in order to facilitate its future engineering as a beneficial object. In this paper, research issues and challenges relating to the vital topic of trust are reviewed, showing how the Web Science agenda requires trust to be addressed, and how addressing the challenges requires a range of disciplinary skills applied in an integrated manner.

Shadbolt, N. and Berners-Lee, T. (2008) Web Science Emerges. Scientific American. 2008



Studying the Web will reveal better ways to exploit information, prevent identity theft, revolutionize industry and manage our ever growing online lives

The evolution of the Web and implications for eResearch 2009



The hypertext visionaries foresaw the potential of richly interlinked global information systems for advancing human knowledge. The Web provided the infrastructure to enable those ideas to become a reality, and it quickly became a platform for collaborative research and data sharing. As the Web has evolved, new ways of using it for eResearch have emerged, such as the social networking facilities enabled by Web 2.0 technologies. The next generation of the Web-the so-called Semantic Web-is now on the horizon, which will again enable new types of collaborative research to emerge. If we are to understand and anticipate these new modes of collaboration, we need a discipline that studies the Web as a whole. Web science is this discipline.

Web Science Doctoral Training Centre



A new Doctoral Training Centre (DTC) for Web Science is part of a £250million investment in the future of UK science and technology by the RCUK Digital Economy programme, providing funded studentships for 4-year PhD training.

Web Science Trust



In order to continue with the work of the WSRI and in support of the global development of Web Science the Directors of WSRI have established a charitable body - the Web Science Trust (WST). Independent of the original founding institutions, the goal is to encourage the widest participation in the development of Web Science.

WST is working with the World Wide Web Foundation. The Foundation has a mission to advance the Web and empower people via the Web. The Trust and the Foundation have a common commitment to advance the new discipline of Web Science, and will work together on projects that improve our understanding of the Web and promote the Web's positive impact on society.

Web Science '09: Conference focuses on Society On-Line 2009



Web Science '09, the first European conference on Web Science, is dedicated to the presentation of research into 'Society on the Web'.

The conference will be held in Athens from 18 to 20 March 2009 and is organized by the Web Science Research Initiative (WSRI) and the Foundation for the Hellenic World (FHW). It will bring together computer scientists and social scientists, and distinguished keynote speakers include Noshir Contractor, Joseph Sifakis and Tim Berners-Lee.

"This Conference allows us to bring together two groups of researchers, from Computer Science and the Social Sciences, to explore the development of the Web across many different areas,' said Professor Dame Wendy Hall, of WSRI. 'This interdisciplinary endeavour, bringing together computer scientists and social scientists perhaps for the first time, is crucial to understanding both the human behaviour and technological design that shape the Web and its use.'

Web Science 09 will be held at The Theatron at the Hellenic Cosmos of the Foundation of the Hellenic World.