

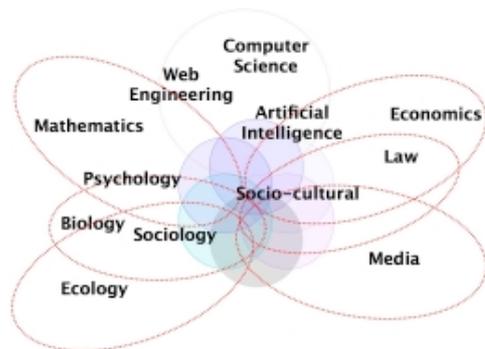
12th Pan-Hellenic Conference on Informatics

Invited session: Web Science Research Initiative

Prologue

Michalis Vafopoulos and George Metakides

The World Wide Web has been transformational. In only a few years it has evolved from an information system for the high-energy physics community, to a general platform supporting information and communication in science, business and government. Freed from the constraints of printing and physical distribution, data and information can be shared quickly and situated within rich contexts. Meanwhile, Web 2.0, built on the principles of user participation, openness and the network effect, has opened up radically new directions, leading to a Web that is two-way, bottom-up and interactive. The Web is no longer a network of computers and information but a network of people. While the economic, social and cultural impacts of the Web are significant, we know relatively little about why the Web is so successful or how it works. We need to understand it better, to anticipate future developments, and to identify opportunities and threats. The term ‘Web Science’, or ‘Science of the Web’, has been used to refer to the study of the Web as a decentralised information system. Web Science is trans-disciplinary, drawing on a diverse range of disciplines, from computer science and engineering, the physical and mathematical sciences, to social sciences and policy-making. This new discipline aims both to understand the Web and to focus its development so as to better meet human needs.



The Web Science Research Initiative [www.webscience.org] was launched in November 2006. It brings together academics, entrepreneurs and decision-makers from around the world to create the first multidisciplinary research framework in order to examine the World Wide Web and offer practical solutions to help guide its future use and design. WSRI is lead by co-directors Tim Berners-Lee (MIT/Southampton), Wendy Hall (Southampton), Nigel Shadbolt (Southampton) and Daniel Weitzner (MIT).

The Initiative has three main goals: research, thought leadership and education. It undertakes research into the scientific, technical and social factors that drive the growth of the Web, so as to better understand recent and emerging phenomena (such as the rapid growth of the Blogosphere), and anticipate new ones (for example the Semantic Web). As a global forum of experts, it also aims to raise awareness, lead thinking, disseminate information and provide corporations, governments and regulators with the capability to anticipate future developments and integrate them into their own planning. In addition, it brings together education specialists in view of developing degree curricula and build capacity in this new field.

In this WSRI context, we are embarking upon a collective effort to establish a South Eastern Europe Web Science pole of competence with a distinct orientation that will emerge in the process.