

Web Science, Social Media and Education

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Abstract

Over the last 25 years the Web has evolved into a critical global infrastructure. Since its emergence in the 1990s, it has exploded into hundreds of billions of pages that touch almost all aspects of modern life. Little appreciated, however, is the fact that the Web is more than the sum of its pages and it is more than its technical protocols. Vast emergent properties have arisen that are transforming society. Web Science is the study of the Web as a socio-technical system. As the Web becomes increasingly significant in all our lives, studying it from an interdisciplinary perspective becomes even more important.

We are now rapidly moving into a world of data on and about the Web, which gives rise to even more opportunities and challenges. In this talk we will explore the role of observatories and data analytics for the development of new methodologies for longitudinal research in Web Science that could help us understand more about how the Web evolves as a social-technical network. After many years of speculation about the potential of on-line learning, web technology has finally developed to a point where on-line learning is today a reality – from MOOCs to complete on-line degree courses. All rely on the use of social media to enhance the learning environment for the students. We will discuss the application of the web observatory approach to the study of on-line learning and the insights such an approach can

reveal that would not be possible in a traditional learning environment – potentially giving rise to world-wide studies in this area.

Bio

Wendy Hall, DBE, FRS, FEng is Professor of Computer Science at the University of Southampton, UK, and was Dean of the Faculty of Physical Science and Engineering from 2010 to 2014. She was Head of the School of Electronics and Computer Science (ECS) from 2002 to 2007. One of the first computer scientists to undertake serious research in multimedia and hypermedia, she has been at its forefront ever since. The influence of her work has been significant in many areas including digital libraries, the development of the Semantic Web, and the emerging research discipline of Web Science. She is now Executive Director of the Web Science Institute at Southampton. She was President of the ACM from 2008-2010, a member of the UK Prime Minister's Council for Science and Technology from 2004-2010 and a founding member of the Scientific Council of the European Research Council. She is currently a member of the Global Commission on Internet Governance and the World Economic Forum's Global Council on AI and Robotics. She holds many fellowships including Fellow of the Royal Society, Fellow of the Royal Academy of Engineering and Fellow of the ACM.