



# Observatories and Data Analytics for Web Science

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**Room 512, Building 38**

## 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 Web Science in helping us understand the origins of the Web, appreciate its current state and anticipate possible futures in order to address the critical questions that will determine how the Web evolves as a social-technical network. We will discuss the role of observatories and data analytics for the development of new methodologies for longitudinal research in Web Science.

## Bio.



- Inventor of Microcosm (1988), one of the earliest hypermedia systems (patent granted), pre-dating the Web
- First female professor of engineering at the University of Southampton (1994), head of school (2002)
- Founder and director of Web Science Trust - long term collaboration between the University of Southampton and MIT
- Awarded CBE in 2000, DBE in 2009
- President of the British Computing Society 2003
- First non-American to be elected President of ACM in 2008
- 350+ publications
- Interests include:
  - Semantic web
  - Hypermedia systems
  - Advanced knowledge technologies
  - Digital libraries
  - Decentralized information systems
  - Human computer interaction

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