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Web Science and Web Technology

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Web Science is a combination of Physical Science and Computer Science. Physical Science tries to analyse microscopic laws to extrapolate them to the macroscopic (e.g. user behaviours). Computer Science deals with the construction of the technical basics of the Web. Web science contains engineering new infrastructure protocols and analysing and understanding the human society who uses the Web and let it grow. It contributes to the knowledge of humanity by making powerful tools and platforms to share data all over the world accessible for everyone. Bringing people closer together is also an aspect of web science, so the decentralization avoids social and technical bottlenecks. (cf. [BLHH+06], [BLHH+08])

It is also important to keep track of the web and its growing behaviour so that the people still can use it efficiently in the near future. Semantic Web is a term which makes it possible to structure the information on the web with metadata. Both automated tools and humans are able to process this data. So Web Science works against these side effects to keep control of the medium. We can see, that web science is a widespread term, because it provides a big variety of themes and technologies. As a software developer i can say, that web science (primarily in my field) has a lot of subdisciplines and disciplines which are related to. Especially programming web applications, which run on servers (e.g. social networks or wikipedia) or distributed programs (P2P) which are able to share data, requires knowledge in web science to have future-proof success in this sector. As an excessive user of the web I recognize, that it is necessary to introduce a science to ensure the trustworthy and findability of data (Keyword RDF). (cf. [SS08])

Literatur

[BLHH+06] Tim Berners-Lee, Wendy Hall, James Hendler, Nigel Shadbolt, and Danny Weitzner. Creating a science of the web. *Science*, 313(5788):769–771, [lib/utils:month_12615not defined] 2006. This is the author's version of the work. It is posted here by permission of the AAAS for personal use, not for redistribution. The definitive version was published in SCIENCE, 313, (11 August 2006), doi:10.1126/science.1126902 http://dx.doi.org/10.1126/science.1126902.

[BLHH+08] Tim Berners-Lee, Wendy Hall, James Hendler, Nigel Shadbolt, and Danny Weitzner. Creating a science of the web. available online http://eprints.ecs.soton.ac.uk/12615/1/ws.html, February 2008.

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