From Text and Data to Knowledge – The Social Semantic Web in Action

Dr. Mark Greaves, Director of Knowledge Systems
Vulcan Inc.
Jesse Wang, Software architect
Vulcan Inc.

Abstract

Knowledge Acquisition has traditionally been the bottleneck of Artificial Intelligence systems. With the dawn of social semantic web technologies, and especially Semantic Wikis, we see ways to combine the power of semantics with the broad usability and social characteristics of wikis. In this talk, we will start with an overview of semantic wikis, with an emphasis on the most popular one: the open source Semantic MediaWiki. We will demonstrate some interesting applications of Semantic MediaWiki as a knowledge acquisition platform, and show how this works in the context of building a knowledge base for an electronic textbook. Finally, we will present our vision for the future and how we are going to achieve the goal of building scalable, high quality knowledge bases. Attendees will get a good overview of semantic wiki technologies (especially Semantic MediaWiki), see various examples of it as a collective knowledge acquisition platform, and understand how the social semantic web can help solve the knowledge acquisition bottleneck.

Speaker’s bio

Dr. Mark Greaves is Director of Knowledge Systems at Vulcan Inc., the asset management company for Microsoft co-founder Paul Allen (www.vulcan.com). He is sponsoring advanced research in large knowledge bases, semantic web technologies and artificial intelligence in general, and leads Project Halo (www.projecthalo.com). Formerly, Mark was at the Defense Advanced Research Projects Agency (DARPA), the central research and development organization of the US Department of Defense. At DARPA, he served as Director of the Joint Logistics Technology Office, and Program Manager in the Information Exploitation Office. He managed a variety of DARPA projects, including the US flagship R&D program in Semantic Web, DAML. Prior to coming to DARPA, Mark worked on advanced programs in software agent technology at the Mathematics and Computing Technology group of Boeing Phantom Works. Mark has a Ph.D. degree from Stanford University and has written several papers and books. Mark is a fellow of STI International and is a well-known speaker on AI and social semantic web technologies.

Jesse Wang is a software architect at Vulcan Inc. He designs, leads and oversees the execution of next generation semantic and intelligent systems. His R&D interests include social semantic web, information retrieval and filtering, machine learning, artificial intelligence and productivity tools in general. Formerly, he worked at Microsoft and led feature development in Microsoft Office. He received his Master of Science degrees in Pattern Recognition and Artificial Intelligence in Tsinghua University and Computer Science from West Virginia University. Jesse served as the general chair of Semantic MediaWiki community conference SMWCon Spring 2012.