

Intelligent Workstation Agents and Unstructured Workstation Data

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Abstract

Many researchers envision a future of intelligent, personalized agents in their computer workstations. These agents could provide a variety of personalized assistance helping to manage email, schedule meetings, gather and summarize relevant information, track progress of various projects, etc.

Perhaps the greatest barrier to creating such intelligent agents is that the data observable to such an agent is unstructured and difficult to automatically interpret – it includes unstructured workstation files (text, images, and other formats), email, calendar entries, web accesses, etc. This talk will discuss current research toward such intelligent workstation agents, and in particular toward making this unstructured data understandable to computer agents. This research is being conducted as part of a multi-university research effort on intelligent personalized assistants.

Bio Sketch

Tom M. Mitchell is the Fredkin Professor of Computer Science at Carnegie Mellon University. His research lies in the area of machine learning, data mining, artificial intelligence, and information fusion. Mitchell is author of the textbook "Machine Learning," Past President of the American Association of Artificial Intelligence (AAAI), and a member of the US National Research Council's Computer Science and Telecommunications Board. In 2002 he received the Debye Prize from the Edmund Hustinx Foundation for his research in computer science. Mitchell is the founding director of CMU's Center for Automated Learning and Discovery, an interdisciplinary research center specializing in statistical machine learning and data mining, and the first institution to offer a Ph.D. program specifically in this area. Mitchell's recent research has focussed on machine learning approaches to analyzing human brain function based on fMRI data, and on machine learning for intelligent personal assistants.