

From Information to Foresight

Getting Beyond the Bits

**Laura Haas, IBM Fellow and Director, Computer Science,
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Data volumes are sky-rocketing, and new sources and types of information are proliferating. There is a real opportunity to harness this data to improve our world ? but to do so, we must do more than capture information. We must correlate and align information across sources, extract meaning from it, and leverage that meaning to create value. This talk will describe some of the challenges and some of the progress that has been made in terms of runtimes and tools to support these tasks, as well as some ongoing research in this space. It will highlight some successful applications of these technologies in a variety of fields, and close with a proposal to work together to advance the state of the art in these technologies and in their application to healthcare.



Laura Haas is an IBM Fellow and has been director of computer science at IBM Almaden Research Center since 2005; she also serves as a "catalyst" for ambitious research across IBM's worldwide research labs. Previously, Dr. Haas was responsible for Information Integration Solutions (IIS) architecture in IBM's Software Group after leading the IIS development team through its first two years. She joined the development team in 2001 as manager of DB2 UDB Query Compiler development. Before that, Dr. Haas was a research staff member and manager at the Almaden lab for nearly twenty years. In IBM Research, she worked on and managed a number of exploratory projects in distributed database systems. Dr. Haas is best known for her work on the Starburst

query processor (from which DB2 UDB was developed); on Garlic, a system which allowed federation of heterogeneous data sources; and on Clio, the first semi-automatic tool for heterogeneous schema mapping. Garlic technology, married with DB2 UDB query processing, is the basis for the IBM InfoSphere Federation Server, while Clio capabilities are a core differentiator in IBM's Rational Data Architect. Dr. Haas is an active member of the database community. She served as Vice President of the VLDB Endowment Board of Trustees from 2004-2009 and was vice chair of ACM SIGMOD from 1989-1997. Dr. Haas has received several IBM awards for Outstanding Technical Achievement and Outstanding Innovation, and an IBM Corporate Award for her work on federated database technology. In 2010 she was recognized with the Anita Borg Institute Technical Leadership Award. She is a member of the National Academy of Engineering and the IBM Academy of Technology, an ACM Fellow, and Vice Chair of the board of the Computing Research Association. Dr. Haas received her PhD from the University of Texas at Austin, and her bachelor degree from Harvard University.

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