Biography

Dr. William R. Pulleyblank is the vice president of the Center for Business Optimization for IBM Business Consulting Services (BCS). Prior to joining BCS, Pulleyblank was the director of Exploratory Server Systems for IBM Research and the director of the IBM Deep Computing Institute.

In his role with Exploratory Server Systems, Pulleyblank led the research team that provides broad-based research support to IBM’s range of servers. He also drove IBM Research initiatives in ultra large-scale computing projects and applications in Life Sciences, including the Blue Gene Project. For the Deep Computing Institute, he coordinated activities both within IBM and with industry, academic and government research partners around the world. The institute brings together experts in the mathematical sciences, computer science, and other disciplines to address challenging business and scientific problems, including Grand Challenge problems.

Pulleyblank was the IBM Partnership Executive for the University of Minnesota. He has served on the Industrial Advisory Committee for the Institute for Mathematics and its Applications at the University of Minnesota, as well as on the board of governors, which he chaired in 1998. Pulleyblank is a member of the advisory council for the Division of Mathematical and Physical Sciences for the National Science Foundation. He also serves on the board of directors of iCORE, the external advisory board of DIMACS, the advisory council of the Pacific Institute for the Mathematical Sciences, RUTCOR Operations Research International Advisory Board (Rutgers University), and is a member of the Scientific Advisory Panel of The Fields Institute for Research in Mathematical Sciences. In addition, he serves on the editorial boards of a number of journals.

Pulleyblank’s personal research interests are in operations research, combinatorial optimization and applications of optimization. In addition to writing a number of scientific papers and books, he has consulted for several companies including: Mobil Oil on helicopter routing; Marks and Spencer on depot management; Statistics Canada on survey validation; and CP Rail on train scheduling.

The H. Milton Stewart School of Industrial and Systems Engineering

2008 Distinguished Lecture

Computing, Business, and Operations Research: The Next Challenges

Dr. William Pulleyblank
Vice President
Center for Business Optimization,
IBM Global Business Services

Thursday, April 17, 2008
Reception @ 3:00 p.m.
Lecture @ 3:30 p.m.
www.isye.gatech.edu/news-events/dls
**Synopsis**

In addition to conventional business data collected in corporate databases, there are increasing amounts of machine-generated data being produced and collected. At the same time, we see remarkable advances in the availability and price performance of computing platforms that can be used to support business decisions based on this data. These factors have created numerous opportunities and challenges. The presentation will focus on addressing five major issues:

- How do we deal with massive amounts of “noisy” data?
- Can we develop adequate methods for handling risk and uncertainty?
- How should we deal with issues of distributed data and computation?
- What does it require for operational systems to match the sophistication of long term planning systems?
- How do we adapt these capabilities to the emerging networked business world?

Businesses are steadily, but slowly, transforming the way that they perform their operations and planning. The types of tools that were at one time limited to very large enterprises are now being used by smaller businesses and even individuals. There is an increasing desire to combine data from a variety of sources with analytic methods to enable more rapid and better decision-making. This is driven in part by the economic pressures created by the need to both compete globally and to exploit global resources, and is enabled by the maturing of methods, tools and underlying technologies.

**Program**

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