



Events

[Current Events](#)[Lectures ▾](#)[Events Archive ▾](#)

IT Eminent Lecture Series

Towards a Software Science of Design**Dr. Alfred Z. Spector, Independent Consultant**

Former CTO and Vice President of Strategy & Technology for IBM's Software Group

Life Sciences Building Annex A101 Auditorium
April 17, 2007 - 03:30 pm**Abstract:**

The process of design refers to the application of synthetic and analytic processes to plan and create new objects. Design is practiced across almost all disciplines in the modern world. In software, design is practiced in many ways, not just the most classic computer science approaches, but approaches across the entire software lifecycle. Software design is undergoing rapid change due to the growing quantity and importance of software, changes in the platforms on which software runs, and growth in the locations across which software is built. There are many arguments for a software science of, or at least discipline of, design: Similar software projects very greatly in the results they achieve, implying there may be better and worse design practices. Additionally, the state of software is not very sound: most software does not delight any of its constituencies. Efficient and quality design are of growing importance to society and national welfare. A software science of design would be highly integrative in nature and would be aimed at facilitating design, but also at better understanding the underlying process. This presentation includes an illustrative collection of relevant research and education topics, both basic and applied.

Speaker's Bio:

Dr. Alfred Spector is currently an independent consultant working with IBM and a few small companies, and performing some government service. In his previous position as CTO and vice president of Strategy & Technology for IBM's Software Group, Dr. Spector was responsible for its technical and business strategy, standards, software development methodologies, advanced technology, and leading-edge technical engagements. Prior to this position, Dr. Spector was vice president of IBM's worldwide services and software research, general manager of marketing and strategy for IBM's middleware business, and general manager of IBM's transaction software business. Dr. Spector was also the founder & CEO of Transarc Corporation, a pioneer in distributed transaction processing & wide area file systems (which IBM acquired) and a tenured faculty member in the Carnegie Mellon University computer science department. Dr. Spector received his Ph.D. in Computer Science from Stanford University and his A.B. in Applied Mathematics from Harvard University. He is a member of the National Academy of Engineering recognized for his contributions to the design, implementation, and commercialization of reliable, scalable architectures for distributed file systems, transaction systems, and other applications. Dr. Spector is also a Fellow of the ACM and IEEE and the Recipient of the IEEE Kanai Award in distributed computing. He is married to Dr. Rhonda Kost and a father of three young children.

This lecture has a reception.