



**CIS Distinguished Lecture Series**  
**Spring 2010**

# **The Internets we did not build**

**David Clark**

**(Massachusetts Institute of Technology)**

*10am-11pm, Friday, March 19*  
*TECH Center 111*

**Abstract:** The network research community has been challenging itself to conceive of what our global network of 15 years from now should be. While the Internet of today is a great success, it also has limitations that suggest it may not be well-positioned to meet all the requirements we will face as we move into the future.

As we consider design options for a future network, we have come to realize that some of the original design decisions, while effective, were not the only way to go. In fact, we could have taken different forks in the road as we designed, and ended up in very different places, perhaps with a network that is equally effective at supporting a wide range of applications, but different in other ways: more secure, easier to install and manage, better aligned to motivate investment, and so on.

In this talk, I will identify a few of these alternate designs, and describe how the network they would induce would differ from what we see today. In doing so, I will try to illustrate both the nature of the design process and the variation in outcomes.

**Bio:** David Clark is a Senior Research Scientist at the MIT Computer Science and Artificial Intelligence Laboratory, where he has worked since receiving his Ph.D. there in 1973. Since the mid 70s, Dr. Clark has been leading the development of the Internet; from 1981-1989 he acted as Chief Protocol Architect in this development, and chaired the Internet Activities Board. His current research looks at re-definition of the architectural underpinnings of the Internet, and the relation of technology and architecture to economic, societal and policy considerations. He is helping the U.S. National Science foundation organize their Future Internet Design program. Dr. Clark is past chairman of the Computer Science and Telecommunications Board of the National Academies, and has contributed to a number of studies on the societal and policy impact of computer communications. He is co-director of the MIT Communications Futures Program, a project for industry collaboration and coordination along the communications value chain.

*Refreshments will be served!*