



Enabling Innovation Inside the Network

Today's computer networks consist of hardware and software components that are closed and proprietary. The difficulty of changing these components has a chilling effect on innovation, and forces network administrators to express policies through complicated and frustratingly brittle interfaces. During the past several years, researchers have proposed a new, more flexible way to program the network. In Software Defined Networking (SDN), software running on commodity servers directly controls the network through open interfaces to the underlying switches.

The emerging OpenFlow standard, already supported by several networking equipment vendors, is gaining significant momentum in enterprise, data center, and backbone networks. In this talk, we give an overview of SDN and OpenFlow, including example applications like dynamic access control, seamless connectivity for mobile users, and server load balancing. We also describe our work on a programming language that substantially lowers the barrier for creating new network applications.

Jennifer Rexford became a Professor in the Computer Science department at Princeton University in 2005, after nine years working at AT&T Labs-Research. She received a BSE in electrical engineering from Princeton University and a PhD in electrical engineering and computer science from the University of Michigan. Jennifer is co-author of the book *Web Protocols and Practice* (Addison-Wesley, 2001) and was the 2004 winner of ACM's Grace Murray Hopper Award for outstanding young computer professional.

Date:	Thursday, January 19, 2012, 8:00 pm. (Refreshments and networking at 7:30 pm.)
Place:	Small Auditorium, Room CS 105 Computer Science Building, Princeton University
Information:	Dennis Mancl (908) 582-7086, Jan Buzydlowski (610) 902-8343
On-line info:	www.acm.org/chapters/princetonacm

All Princeton ACM / IEEE-CS meetings are open to the public. Students and their parents are welcome. There is no admission charge, and refreshments are served.

A pre-meeting dinner is held at 6:00 p.m. at Ruby Tuesday's Restaurant on Route 1. Please send email to princetonacm@acm.org in advance if you plan to attend the dinner.

