

## Distinguished Lectures

Fall 2016



Colorado State University's Information Science and Technology Center (ISTeC) presents two lectures by

### Dr. Scott Jordan

Professor of Computer Science  
University of California, Irvine  
Chief Technology Officer, Federal Communications Commission

### ISTeC Distinguished Lecture

In conjunction with the Department of Electrical and Computer Engineering, and Department of Computer Science Seminar Series

#### ***"Intersections between Information Technology Research and Public Policy"***

Monday, Oct. 3, 2016

Reception with refreshments: 10:30 a.m.

Lecture: 11:00 a.m.-12:00 noon

Morgan Library Event Hall

Department of Electrical and Computer Engineering, and Department of Computer Science Special Seminar *Sponsored by ISTeC*

#### ***"IP Interconnection: Technology, Economics, and Law"***

Monday, Oct. 3, 2016

Lecture: 2:00-3:00 p.m.

Lory Student Center 372

#### Abstracts

##### ***Intersections between Information Technology Research and Public Policy***

Information technology researchers often assume that good research will lead to deployment in the Internet of new systems based on that research. Universities often assume that the principal barrier to deployment is the transition from research idea to prototype. In this talk, I will argue that these assumptions are often incorrect, and that deployment based on good information technology research is often stymied by a combination of economic and legal issues that were not considered in the research. I will present three case studies: quality-of-service, IP interconnection, and device attachment. We will discuss whether the manner in which each was deployed coincides with the original research vision; what factors may have resulted in perturbations from the original vision; and whether these perturbations are in the public interest. I will encourage information technology researchers to pay attention to what is in the public interest, to the interests of the parties that may implement the idea, and to whether these interests coincide.

##### ***IP Interconnection: Technology, Economics, and Law***

The Internet relies upon interconnection between various Internet Service Providers. Historically, regional ISPs paid backbone providers for transit service, and backbone providers made settlement-free peering arrangements between themselves. However, as regional ISPs have gained their own backbone networks, such arrangements have been in flux, and it is no longer clear who should pay whom and for what type of interconnection service. Disagreements between interconnecting parties have sometimes resulted in insufficient capacity at interconnection points, and consumers have suffered from the resulting congestion. In this talk, I will discuss technological, economic, and legal aspects of IP interconnection, and suggest a framework for evaluating such tussles.

#### Speaker Biography

Scott Jordan is a Professor of Computer Science at the University of California, Irvine. His research has focused on Internet quality of service issues, including traffic management and resource allocation, in both wired and wireless networks. His current research interests are Internet policy issues, including net neutrality, data caps, and device attachment.

Scott is currently serving as the Chief Technologist at the Federal Communications Commission. He advises on technological issues across the Commission.

Scott received the Ph.D. degree in Electrical Engineering & Computer Science from the University of California, Berkeley. In 2006, he served as an IEEE Congressional Fellow, working in the United States Senate on communications policy issues.

To arrange a meeting with the speaker, please contact Prof. Edwin Chong, 970-491-7855, (edwin.chong@colostate.edu); or Prof. Anura Jayasumana, 970-491-7855, (Anura.Jayasumana@ColoState.edu).

### Upcoming Distinguished Lectures

October 17

***"Towards a Science of Complex Data"***

11:00 am -12:00 noon



Morgan Library Event Hall

**Dr. Alfred O. Hero III**

October 24

***"Machine Learning and Democracy: Some Problems in Collective Decision-Making"***

11:00 am -12:00 noon



Morgan Library Event Hall

**Dr. Sanjeev Kulkarni**

December 5

***"Quantitative Ethnography: Measuring Complex Thinking Using Grounded Data"***

11:00 am -12:00 noon



Morgan Library Event Hall

**Dr. David Shaffer**