

# Soumya Sen

Assistant Professor

## EDUCATION

- **PhD 2011**  
Electrical & Systems Engineering, University of Pennsylvania
- **MS 2008**  
Electrical Engineering, University of Pennsylvania
- **B.E. (Hons.) 2005**  
Electronics & Instrumentation Engineering BITS, Pilani
- **Postdoc 2013**  
Electrical Engineering, Princeton University

## EXPERTISE

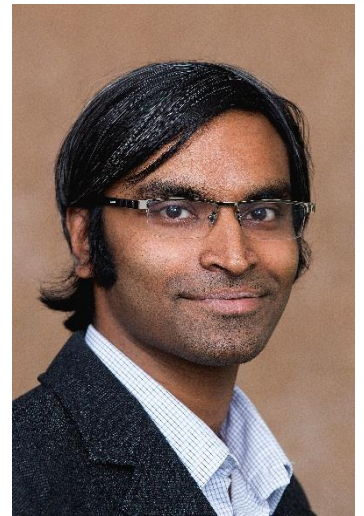
- Internet Technologies
- Data Communications
- Electronic Commerce
- Information Economics
- Broadband Data Pricing
- Cloud Technologies
- Network Security

## ABOUT

His research takes a multi-disciplinary approach involving computer networks, economics, and human-computer interaction. His research interests are in Internet economics, communication systems, social networks, and network security. Soumya has published in and served as a reviewer for several highly cited AIS, IEEE, and ACM conferences and journals. His research articles on social media and networks have received media coverage in MIT Technology Review, The Wall Street Journal, ACM Tech News, Yahoo News, Politico, as well as several European news media. His works on Internet pricing and resource allocation have been finalist at the 2011 Vodafone Wireless Innovation project and he received the BITSAA 30 under 30 Award from BITS-Pilani, India. He won the Best Paper Award at IEEE INFOCOM 2012, and the INFORMS ISS Design Science Award 2014 for his work in the area of "Smart Data Pricing". Soumya was elected to IEEE Senior Member in 2016.

Soumya is a co-founder of a startup, DataMi, which provides Internet pricing solutions. He is also a founder and organizer of the Smart Data Pricing (SDP) Forum, which promotes industry-academic interaction on Internet pricing research and is the editor of a book titled "Smart Data Pricing", published by John Wiley & Sons on this topic.

He received the B.E. (Hons.) in Electronics and Instrumentation Engineering from BITS-Pilani, India, in 2005, and both the M.S. and Ph.D. in Electrical and Systems Engineering from the University of Pennsylvania in 2008 and 2011, respectively, during which he collaborated with faculties from both engineering and the Wharton Business School. He carried out his postdoctoral research at the Princeton University.



## RECENT WORKS

1. Y. Im, C. Joe-Wong, S. Ha, S. Sen, T. Kwon, M. Chiang, "AMUSE: Empowering Users for Cost-Aware Offloading with Throughput-Delay Tradeoffs," IEEE Transactions on Mobile Computing (accepted), 2015
2. S. Sen, C. Joe-Wong, S. Ha, M. Chiang, "Smart Data Pricing: Using Economics To Manage Network Congestion," Communications of the ACM, (Top CS publication. Impact Factor: 2.87), December 2015
3. C. Joe-Wong, S. Sen, S. Ha, "Offering Supplementary Network Technologies: Adoption Behavior and Offloading Benefits," IEEE/ACM Transactions on Networking (ranked 2nd among all Computer Science journals by Times Higher Education), pp. 355-368, vol. 23: 2, 2015