Abstract:
The need for users to regain control of their online data has never been clearer. News reports continue to reveal that not only are users’ online communications and data vulnerable to malicious insiders, but also to hackers and government-level surveillance. In this talk, I will describe how to create secure email for the masses. This includes addressing both technical issues—e.g., how to secure cloud-based Webmail software—as well as user-facing issues—e.g., how to ensure that users correctly encrypt their email. Finally, I will discuss promising future research, including using this work to secure cloud-based software-as-a-service (SaaS), allowing businesses and users to better control the security and privacy of their online data.

Bio:
Scott Ruoti is a research scientist at MIT Lincoln Laboratories. He received his Ph.D. from Brigham Young University in 2016. His research focuses on security & privacy, human-computer interaction, and usable security & privacy. His current projects include research into the fundamentals of Blockchain technology, securing cloud-based software-as-a-service, and evaluating the effectiveness of two-factor authentication. He is also the Chief Architect for Cyber.gov, a program tasked with creating a comprehensive cybersecurity architecture for the Federal government.