Towards Usable and Practical Image Privacy

ABSTRACT
Today image hosting platforms are a popular way to store and share images with family members and friends. However, such platforms typically have full access to images raising privacy concerns. In this talk we motivate the need for image privacy protection techniques that preserve certain visual features in images while hiding other information, to balance privacy and usability in the context of cloud-based image storage services. We will explore privacy schemes that use cryptographic, adversarial perturbation and semantic perturbation approaches and discuss their pros and cons.

SPEAKER BIO
Rakesh B. Bobba is an associate professor in the School of EECS. He received his M.S. and Ph.D. degrees from the University of Maryland at College Park in 2007 and 2009 respectively. Prior to joining Oregon State in 2014, he was a research assistant professor at the University of Illinois, Urbana-Champaign with appointments in ITI, ECE, and CS departments. Bobba's research interests are in the design of secure and trustworthy networked and distributed computer systems, with a current focus on cyber-physical critical infrastructures, real-time systems, and image privacy. He has co-authored more than 50 peer-reviewed papers in premier conferences and journals in his field. Bobba's research has been supported by DOE, ARPA-E, ONR, AFRL/AFOSR, and NSF.

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Talk: 11:00-11:30 AM PDT
Q/A: 11:30-11:45
Zoom: https://beav.es/tech-talk
https://eecs.oregonstate.edu/tech-talk-tuesday

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