## KEYNOTE TALK Wednesday, December 10, 2014 8:30 PM – 9:30 PM / Ballroom 5

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Facial Cosmetics, Spoof Attacks, Data Privacy: Biometrics in the Real World

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## **Abstract**

Biometrics is the science of recognizing individuals based on their physical and behavioral attributes such as fingerprints, face, iris, voice and signature. The past decade has witnessed tremendous progress in this field, including the deployment of biometric solutions in diverse applications such as border security, national ID cards, amusement parks, access control, and smartphones. Despite these advancements, biometric systems have to contend with a number of challenges related to data quality, spoof attacks, and personal privacy. This talk will highlight some of the recent progress made in the field of biometrics; present our lab's work on makeup invariant face recognition, fingerprint spoof detection, and biometric data privacy; and discuss some of the challenges that have to be solved in order to promote the widespread use of this technology.



**Speaker Bio-Sketch:** Arun Ross is an Associate Professor in the Department of Computer Science and Engineering at Michigan State University (MSU) and the Director of the i-PRoBe Lab. Prior to joining MSU in 2013, he was in the faculty of West Virginia University (WVU) from 2003 to 2012. He also served as the Assistant Site Director of the NSF Center for Identification Technology and Research (CITeR) between 2010 and 2012. Arun received the B.E. (Hons.) degree in Computer Science from the Birla Institute of Technology and Science, Pilani, India, and the M.S. and Ph.D. degrees in Computer Science

and Engineering from Michigan State University. He is the coauthor of the textbook "Introduction to Biometrics" and the monograph "Handbook of Multibiometrics," and the co-editor of "Handbook of Biometrics". He is a recipient of the JK Aggarwal Prize, IAPR Young Biometrics Investigator Award (YBIA), the NSF CAREER Award, and was designated a Kavli Frontier Fellow by the National Academy of Sciences in 2006. He was an Associate Editor of IEEE Transactions on Information Forensics and Security (2009 – 2013), and IEEE Transactions on Image Processing (2008 – 2013). He currently serves as Area Editor of the Computer Vision and Image Understanding Journal, Associate Editor of the Image and Vision Computing Journal, Vice President of Education of the Chair TC4 **Biometrics** Council. and Vice of the IAPR Biometrics. URL: http://www.cse.msu.edu/~rossarun/