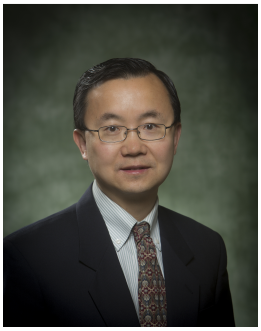
UNIVERSITY AT ALBANY
State University of New York

College of Engineering and Applied Sciences
Computer Science Department

Colloquium



Date and time: Tuesday, September 1, 2015, 2:00 - 3:30 p.m.
Venue:

Title: **3D Spatial-Temporal Facial Behavior Analysis**

Speaker: **Prof. Lijun Yin**, State University of New York at Binghamton **(https://www.binghamton.edu/cs/people/lijun.html)**

Abstract: Research on 3D facial behavior analysis has intensified in recent years due to its wide range of applications in human computer interaction, security, telecommunication, and entertainment. In this talk, I will introduce the recent work in areas of 3D face-related information processing, including 3D dynamic face modeling, 3D spatial-temporal facial expression analysis, etc. A facial surface is a three-dimensional time varying 'wave', which is associated with the movement of facial expressions. Tracing the behavior of the 3D primitive features in a spatial-temporal domain could reveal precious information about the nature of the underlying physical process. We have investigated a new approach for 3D facial surface tracking, feature analysis, and classification. We used a spatiotemporal model to incorporate 3D surface feature characterization to learn the spatial and temporal information of faces. Our created 3D/4D facial expression databases have been made available to the research community. Some implemented results will be demonstrated. Future developments and possible extensions of the work will also be discussed at the final.

Speaker's brief bio: Dr. Lijun Yin is a Professor of Computer Science, Director of Graphics and Image Computing Laboratory, and Co-director of Seymour Kunis Media Core, T. J Watson School of Eng. and Applied Sc. at the State University of New York at Binghamton. He received Ph.D. in 2000 from the University of Alberta in Computer Science and Master in EE from Shanghai Jiao Tong University. Dr. Yin's research focuses on the areas of computer vision, graphics, HCI, and multimedia, specifically on face and gesture modeling, analysis, recognition, animation, and expression understanding; affective computing and biometrics; geometric space motion tracking, and biomedical image processing. His research has been supported by the National Science Foundation, Air Force Research Lab and AFOSR, SUNY Upstate Medical Center, and NYSTAR. Dr. Yin received the James Watson Investigator Award of NYSTAR in 2006 and SUNY Chancellor's Award for Excellence in Scholarship & Creative Activities 2014. He received the Best Paper Award of ICPR 2006, and was granted two US patents. He served as a program chair of IEEE International conference on Automatic Face and Gesture Recognition 2013. He is currently serving on the editorial board of Journal of Image and Vision Computing, and Pattern Recognition Letter.

For more information, please contact Dr. Pradeep Atrey, email: patrey@albany.edu, phone: (518) 442 4281