



## Biomedical Informatics Grand Rounds



**Haibin Ling, PhD**

*SUNY Empire Innovation Professor*

*Department of Computer Science*

### Visual Tracking: Challenges, Algorithms, and Benchmarks

**Wednesday, Oct 28, 2020 3 pm - 4 pm**

#### **Abstract:**

As a fundamental problem in computer vision, visual tracking serves as a key component in a wide spectrum of applications including video surveillance, augmented reality, medical analytics, robotics, etc. In this talk, we will first summarize research conducted in our group on visual tracking in line with the development trend of the entire field, and provide lessons learned and ideas motivated. Then, we will introduce our recent studies on various tracking problems including generic single-target tracking, planar object tracking, deformable tracking, and multi-target tracking. These studies cover both the algorithmic and benchmarking aspects of visual tracking, and involve both traditional modeling and deep-learning based strategies. Related publications and materials can be found at <https://www3.cs.stonybrook.edu/~hling/publication-selected.htm>.

#### **Bio:**

Haibin Ling received the B.S. and M.S. degrees from Peking University in 1997 and 2000, respectively, and the Ph.D. degree from the University of Maryland, College Park, in 2006. From 2000 to 2001, he was an assistant researcher at Microsoft Research Asia. From 2006 to 2007, he worked as a postdoctoral scientist at the University of California Los Angeles. In 2007, he joined Siemens Corporate Research as a research scientist; then, from 2008 to 2019, he worked as a faculty member of the Department of Computer Sciences at Temple University. In fall 2019, he joined Stony Brook University as a SUNY Empire Innovation Professor in the Department of Computer Science. His research interests include computer vision, augmented reality, medical image analysis, and human computer interaction. He received Best Student Paper Award at ACM UIST (2003), NSF CAREER Award (2014), Yahoo Faculty Research and Engagement Program Award (2019), and Amazon Machine Learning Research Award (2019). He serves as Associate Editors for several journals including IEEE Trans. on Pattern Analysis and Machine Intelligence (PAMI), Pattern Recognition (PR), and Computer Vision and Image Understanding (CVIU). He has served as Area Chairs various times for CVPR and ECCV.

#### **Continuing Medical Education Credits:**

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