

專 題 演 講

講 者：Dr. Ming-Ching Chang, Assistant Professord (Dept. of Computer Science, College of Engineering and Applied Sciences (CEAS) University at Albany, State University of New York (SUNY), USA)

題 目：AI Video Analytic Research in the SUNY Albany CVML Lab

摘 要：

Emerging AI Video Analytics technologies are transforming our world in making everything more convenient, secure, and innovative. Smart devices, intelligent software agents, and cloud services are all pushing the boundary of technologies that impacts our daily life. In this talk, I will introduce how computer vision and AI technologies are improving a smarter world in several aspects. Among many changing fronts, in the first part of the talk, I will focus on our recent work on 3D single-person concurrent activity detection using stacked relation network. In the second part of the talk, I will highlight four research directions in our lab: (1) video analytics in AI smart transportation, (2) human-centric video scenario understanding, including human pose estimation, facial analysis, action recognition, and group behavior analysis, (3) industrial video analytics including site monitoring and situational awareness, and (4) image/video forensics for the defense against fake medias and disinformation attacks. The talk will conclude with technology development trends and future directions.

簡 歷：

Ming-Ching Chang is an Assistant Professor at the Department of Computer Science, College of Engineering and Applied Sciences (CEAS), University at Albany, State University of New York (SUNY). He was with the Department of Electrical and Computer Engineering from 2016 to 2018. He was an Adjunct Professor with the Computer Science Department from 2012-2016. During

2008-2016, he was a Computer Scientist at GE Global Research Center. He received his Ph.D. degree in the Laboratory for Engineering Man/Machine Systems (LEMS), School of Engineering, Brown University in 2008. He was an Assistant Researcher at the Mechanical Industry Research Labs, Industrial Technology Research Institute (ITRI) at Taiwan from 1996 to 1998. He received his M.S. degree in Computer Science and Information Engineering (CSIE) in 1998 and B.S. degree in Civil Engineering in 1996, both from National Taiwan University.

Dr. Chang's research interests include video analytics, computer vision, image processing, and artificial intelligence. Dr. Chang has published over 70 refereed journal and conference papers. His research projects are funded by DARPA, IARPA, NIJ, VA, GE Global Research, Kitware, and University at Albany - SUNY. He is the recipient of the IEEE Advanced Video and Signal-based Surveillance (AVSS) 2011 Best Paper Award - Runner-Up, the IEEE Workshop on the Applications of Computer Vision (WACV) 2012 Best Student Paper Award, the GE Belief - Stay Lean and Go Fast Management Award in 2015, and the IEEE Smart World NVIDIA AI City Challenge 2017 Honorary Mention Award. Dr. Chang serves as the Program Chair of the IEEE Advanced Video and Signal-based Surveillance (AVSS) 2019 Conference, the Co-Chair of the AI City Challenge (CVPR Workshop) 2018-2020, and Co-Chair of the International Workshop on Traffic and Street Surveillance for Safety and Security (IWT4S) 2017-2019. He is a senior member of IEEE.