1116-90-200 Qi Yang* (yangq@usc.edu), Alejandro Camacho, Piyali Mukherjee and Rafael Aguayo. Detecting Foot-Chases from Police Body-Worn Video.

Existing methods to record interactions between the public and police officers are unable to capture the entirety of policepublic interactions. In order to provide a comprehensive understanding of these interactions, the Los Angeles Police Department (LAPD) intends to utilize *Body-Worn Video* (BWV) collected from cameras fastened to their officers. BWV provides a novel means to collect fine-grained information about police-public interactions. The purpose of this project is to identify specific features from videos, in particular foot-chases, using machine-learning algorithms. Our proposed algorithm uses semi-supervised methods such as the detection of point-features and their classification via support-vector machines. Our training dataset consists of 100 training videos (20 foot-chase & 80 non-foot-chase) and a test dataset of 60 LAPD videos (4 foot-chase & 56 non-foot-chase). We achieved results of 91.6% testing accuracy. This is joint work with Hayden Schaeffer and P. Jeffrey Brantingham. (Received August 13, 2015)