

Analyzing Video and Audio from Body Worn Cameras

Description and Questionnaire

The Los Angeles Police Department (LAPD or the Department), Justice & Security Strategies Inc. (JSS), the University of California, Los Angeles (UCLA), and the Los Angeles Police Foundation (LAPF) are conducting a three-year study of the use of body worn cameras by law enforcement. Under a grant from the National Institute of Justice (NIJ), United States Department of Justice, the four organizations are evaluating the use of cameras and examining the way in which footage from cameras is analyzed.

Currently, the LAPD has over 420,000 videos covering over 60,000 hours of footage. Not all of these videos will be reviewed, nor should they be. But when they are reviewed, it is time-consuming and labor intensive. The Department is looking for analytics (video and/or audio) that can assist it in successfully searching, identifying, and tagging different situations using algorithms or formulae.

You have been invited to give us a presentation about your product(s) at the Police Administration Building, Los Angeles Police Department, 100 W. First Street, Los Angeles, CA 90012, Room 839. A projector, laptop, and screen are available.

We are interested in how you analyze video footage and how you analyze audio. You need not do both. Our primary interest is with the analysis of video. We are not interested in redaction or other aspects of body worn cameras. If you do not analyze video or audio, please let us know.

We are inviting 10-12 vendors, technologists, and academicians to demonstrate their products. You will be given a total of 90 minutes for your presentation and for questions and answers. We will select a small number to work with over the next 9-12 months.

Funding is unavailable at this time for travel or other compensation. You will be responsible for bearing those costs.

During your presentation please provide information regarding your background, areas of expertise, education, and current or previous law enforcement clients.

Prior to your visit, please fill out the following questionnaire and return it by July 20, 2016 to:

Dr. Craig D. Uchida
cduchida@jssinc.org

Sgt. Daniel Gomez
Daniel.Gomez@lapd.lacity.org

Questionnaire

Vendor Name: _____

Address: _____

Point of Contact: _____

Telephone Number: _____

Email Address: _____

Basic Questions:

Have you analyzed video footage using algorithms or mathematical formulae?

Y N

If yes, is the footage from a body-worn camera or a camera in motion? Y N

Is the footage from a fixed position video camera? Y N

Is the footage from other types of cameras? Y N Please specify _____

Please indicate the sources of video that you have analyzed (check all that apply):

Law Enforcement

Military

Other government agencies

Medical industry

Other, please specify: _____

How long have you been involved in video analytics (years and/or months)?

Audio Analysis

Have you analyzed data from audio sources? Y N

Have you analyzed audio data from body worn cameras? Y N

How long have you been involved in audio analytics (months and/or years)?

Have you successfully sold/delivered your video or audio software analytic tool to a customer/client? ___Y ___N

Would you be willing to provide a list of customers/clients? ___Y ___N

(We can discuss this during your presentation)

Potential Scenarios/Items of Interest

We recognize that analyzing video footage is complex and requires examples of situations of interest. At this time we cannot provide you with LAPD body worn camera video footage. However, the following items are priorities for the Department and will be discussed at your meeting.

1. Supervisors reviewing video want to know if it is possible to determine when the cameras are on and off. Are there ways to determine when the camera has been activated and when the situation has ended? Can you analyze distinct movements (e.g., getting out of the patrol car) that may be of value?

2. Police agencies are interested in searching, identifying, and tagging foot pursuits. Have you analyzed these types of encounters?

3. Police agencies are interested in searching, identifying, and tagging traffic stops. Have you analyzed these types of encounters?

Research in Industrial Projects for Students



Sponsor

Los Angeles Police Department

Final Report

Change-point Detection Methods for Body-Worn Video

Student Members

Stephanie Allen (Project Manager), *SUNY Geneseo*

David Madras, *University of Toronto*

Ye Ye, *UCLA*

Greg Zanotti, *DePaul University*

Academic Mentor

Dr. Giang Tran, *University of Texas at Austin*
gtran@math.utexas.edu

Sponsoring Mentors

Sgt. Javier Macias, *LAPD*

Officer Benjamin Hong, *LAPD*

Commander Sean Malinowski, *LAPD Chief of Staff*

Ms. Maggie Goodrich, *LAPD CIO*

Consultants

Dr. Jeffrey Brantingham, *UCLA*

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