



VIP-CUP ORGANISERS

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IEEE ICIP 2019

2019 IEEE Video & Image Processing (VIP) Cup

Activity Recognition from Body Cameras

<http://cis.eecs.qmul.ac.uk/VIPCup.html>

2019 IEEE International Conference on Image Processing (ICIP),
September 22-25, 2019, Taipei, Taiwan

The increasing availability of wearable cameras enables the collection of first-person videos (FPV) for the recognition of activities at home, in the workplace and during sport activities. FPV activity recognition has important applications, which include assisted living, activity tracking and life-logging. The main challenges of FPV activity recognition are the presence of outlier motions (for example due to other people captured by the camera), motion blur, illumination changes and self-occlusions.

The 2019 VIP-Cup challenge focuses on FPV from a chest-mounted camera and on the privacy-aware recognition of activities, which include generic activities, such as *walking*, person-to-person interactions, such as *chatting* and *handshaking*, and person-to-object interactions, such as *using a computer* or *a whiteboard*. As videos captured by body cameras may leak private or sensitive information about individuals, the evaluation of the IEEE VIP-Cup challenge entries will include *privacy enhancing solutions* jointly with the recognition performance. A dataset of activities from several subjects is provided with the annotation for training and validation (<http://www.eecs.qmul.ac.uk/~andrea/fpvo>). The evaluation will be performed based on separate test datasets.

Prizes

- The Champion: \$5,000
- The 1st Runner-up: \$2,500
- The 2nd Runner-up: \$1,500

Travel Support

Each finalist team invited to the ICIP 2019 will receive travel support by the IEEE SPS on a reimbursement basis. A team member is offered up to \$1,200 for continental travel, or \$1,700 for intercontinental travel. A maximum of 3 members per team will be eligible for travel support.

Eligibility Criteria

Each team must be composed of: (i) One faculty member (the Supervisor); (ii) At most one graduate student (the Tutor), and; (iii) At least 3 but no more than 10 undergraduates. At least three of the undergraduate team members must be either IEEE Signal Processing Society (SPS) members or SPS student members.

Important Dates

April 30, 2019 Participation Guidelines and Initial Training Dataset released;
May 5, 2019 Additional Training Dataset released
June 15, 2019 Deadline for the submission
July 15, 2019 Finalists (best three teams) announced
July 30, 2019 Test Dataset 1 released
September 22, 2019 Competition on Test Dataset 2 at ICIP 2019

Questions should be directed to Dr. Girmaw Abebe Tadesse (girmaw.abebe@eng.ox.ac.uk).