



Holoscopic Micro-Gesture Recognition Challenge 2018 (HoMGR 2018) will be held at **IEEE Face & Gesture 2018 (FG2018)**, <https://fg2018.cse.sc.edu>) - Xi'An, 15-19 May 2018. The official website will be: <http://3dvie.co.uk/>.

Challenge Description

The rapid development of Augmented Reality (AR) and Virtual Reality (VR) technology has led to high demand on precise finger movement-based controllers for gaming and other applications. Immersive holoscopic 3D imaging technology has been explored a lot recently and some small size sensors are now available. It can produce a 2D image with 3D information in it from lens array inside. This challenge will provide the opportunity to the research community to design finger micro-gesture recognition system using their own 3D image processing, feature extraction and classification methods, on a new built holoscopic 3D micro-finger gesture dataset.

The dataset contains image sequences of different conventional finger micro-gestures (i.e. Button, Dial and Slider) from 50 participants. The two sub-challenges will be

- Holoscopic 3D image based micro-gesture recognition.
- Holoscopic 3D video based micro-gesture recognition.

We are calling for teams to participate in the challenge of fully automatically recognising micro-gestures from holoscopic 3D image and/or video data. Participants will be allowed to apply their own 3D image pre-processing, feature extraction and classification methods in one or both sub-challenges.

Submission

A participating team can submit their test results for evaluation up to HoMGR2018@gmail.com. Paper should be submitted in PDF and should be no more than 8 pages in IEEE FG 2018 paper format. All submissions will be rigorously assessed by a double-blind peer review process. Accepted papers will be included in the Proceedings of IEEE FG 2018 and Workshops and will be sent for inclusion into the IEEE Xplore digital library.

Important Dates (Pacific Time)

- The website will be launched: 12th Nov. 2017
- Training and validation dataset available: 15th Nov. 2017
- Testing dataset available: 10th Jan 2018
- Deadline for uploading the results: 18th Jan 2017
- Paper submission deadline: 28th Jan. 2018
- Notification: 25th Feb. 2018
- Camera-ready papers: 4th Mar. 2018

Organizers

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