



REMOTE PHYSIOLOGICAL MEASUREMENT FROM THE FACE AND BODY

Special Session at [12th IEEE Conference on Automatic Face and Gesture Recognition 2017](#)

May 31st – June 3rd, 2017

Washington DC

Over the past 10 years there have been significant advances in remote imaging methods for capturing physiological signals. These methods utilize machine learning and digital signal and image processing to recover very subtle changes in videos caused by human physiology. Physiological parameters including pulse rate, respiration rate, pulse rate variability, blood oxygenation, blood perfusion, and pulse transit time have been measured using these approaches. These signals are clinically important as vital signs and are also influenced by autonomic nervous system activity. For instance, remote measurement of physiological responses has also been leveraged to build systems for remotely capturing cognitive load and stress during computer tasks

We will be hosting a **special session** on **remote measurement of physiology** at the [12th IEEE Conference on Automatic Face and Gesture Recognition](#) in Washington DC in June 2017.

We are calling for papers on, but not limited to, the following topics:

- New methods for recovering additional physiological signals from visible, near-infrared, and thermal imagery (e.g., blood pressure).
- Improved algorithms for recovering physiological signals from visible, near-infrared, and thermal camera imagery in the presence of motion, facial expressions and environmental effects.
- Novel apparatus/imaging hardware for capturing physiological signals remotely. Including multispectral cameras, multi-camera arrays and long distance image capture.
- Detection/classification of affective or cognitive states from physiological signals extracted from video.
- Applications of remote physiological measurement in affective computing and healthcare including affect detection systems, cognitive load tracking, infant monitoring, and ICU cameras.
- “In-the-wild” measurement of signals, taking research out of the lab and validating or deploying remote physiological measurement in less constrained settings.

Papers should be in the standard FG2017 format – instructions are available [here](#).

Submissions can be made through the [FG2017 CMT system](#).

IMPORTANT DATES:

Paper Submissions – 15th December 2016

Paper Notification – 31st January 2017