
Call for Papers (CFP)

**The 1st International Workshop on
Computer Vision for Physiological
Measurement**

In conjunction with IEEE CVPR '18



Workshop website: www.es.ele.tue.nl/cvpm18

Main conference website: <http://cvpr2018.thecvf.com/>

The 1st International Workshop on Computer Vision for Physiological Measurement (CVPM) will be held in conjunction with the Int'l Conference on Computer Vision and Pattern Recognition (CVPR 2018) in Salt Lake City, Utah, USA (June 18th-22nd, 2018).

CVPM 2018 aims to explore the devices, algorithms and applications of image and video-based physiological measurement.

We invite high-quality submission of original research addressing one or more of the following topics:

- **Methods for extracting physiological signals/variables from videos**, including pulse rate, pulse rate variability, respiration rate, blood oxygen saturation, pulse transit time, blood pressure, atrial fibrillation (AFib), arterial stiffness, skin hydration, core body/skin temperature, etc.
- **Methods for camera-based methods that aid physiological monitoring systems**, such as CNN-based face/skin detection, motion tracking, video segmentation, quality metric learning, physiological pattern recognition, algorithmic optimization, etc.
- **Imaging devices/hardware for sensing physiological signals from human face and body**, including multi-spectrum cameras, time sequential cameras, time-of-flight cameras, stereo vision cameras, long-distance image capture, wearable/portable cameras, and low-cost cameras that are sensitive at visible, near-/far- infrared, or thermal wavelengths.
- **Applications for image or video-based physiological monitoring**, such as in Intensive Care Units (ICU), baby monitoring, general wards and clinics, emergency department triage, elderly care, sleep monitoring, bed exit detection, fall detection, remote prescription, fitness cardio-training, driver state monitoring in automotive, etc.
- Camera based physiological measurement for detecting affective, emotional, or cognitive states. Including: stress detection, measurement of sympathetic and parasympathetic nervous system activity and basic emotion detection.
- Camera based physiological measurement to assist video surveillance in the wild.
- Camera based physiological measurement to assist human computer interaction, entertainment, gaming, and marketing.
- Living skin detection and human aliveness detection.
- Face anti-spoofing and biometric recognition.

- New public benchmarks and datasets for camera based physiological measurement.
- Summary/review for the latest progress in camera based physiological measurement.

Invited keynote speakers:

- [Prof. William T. Freeman](#) (Massachusetts Institute of Technology, USA)
- [Prof. Steffen Leonhardt](#) (RWTH-Aachen, Germany)

Program Committee:

- Prof. Gerard de Haan (Philips Research)
- Prof. Alexei A. Kamshilin (ITMO University)
- Prof. Alexander Wong (University of Waterloo)
- Prof. Izumi Nishidate (Tokyo University of Agriculture and Technology)
- Dr. Lalit K. Mestha (GE Global Research)
- Dr. Ming-Zher Poh (Massachusetts Institute of Technology)
- Dr. Wim Verkruijsse (Philips Research)
- Dr. Ihor Kirenko (Philips Research)
- Dr. Albertus C. den Brinker (Philips Research)
- Dr. Mauricio Villarroel Montoya (University of Oxford)
- Dr. Robert Amelard (University of Waterloo)
- Dr. DangDang Shao (Qualcomm Research)
- Justin Estep (Airforce Research Laboratory)
- Ethan Blackford (Ball Technologies)
- Weixuan Chen (Massachusetts Institute of Technology)
- Mark van Gastel (Eindhoven University of Technology)

Workshop Details:

1. Date & Time: June 22nd, 2018 (Friday)
2. Location: Salt Lake City, Utah, USA
3. Submission site: www.es.ele.tue.nl/cvpm18
4. Author guidelines: The paper formatting should follow the [CVPR 2018 main conference guidelines](#).

Important Dates:

1. Submission deadline: **March 5th, 2018**
2. Notification to authors: **April 1st, 2018**
3. Camera-ready deadline: **April 10th, 2018**

Organizers:

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