

**Title:**

Image/video processing

**Abstract:**

Image/video processing is a key computer vision task, aiming at the restoration of degraded Image/video, the filling in of missing information, or the needed transformation and/or manipulation to achieve a desired target (with respect to perceptual quality, contents, or performance of apps working on such images) etc. Recent years have witnessed an increased interest from the vision and graphics communities in these fundamental topics of research. Not only has there been a constantly growing flow of related papers, but also substantial progress has been achieved.

Each step forward eases the use of images by people or computers for the fulfillment of further tasks, as Image/video processing serves as an important front end. Not surprisingly then, there is an ever growing range of applications in fields such as surveillance, the automotive industry, electronics, remote sensing, or medical image analysis etc. The emergence and ubiquitous use of mobile and wearable devices offer another fertile ground for additional applications and faster methods.

**Scope and Topics:**

Potential topics include but are not limited to:

- ✧ Image-to-image translation
- ✧ Video-to-video translation
- ✧ Image/video manipulation
- ✧ Perceptual manipulation
- ✧ Image/video generation and hallucination
- ✧ Image/video quality assessment
- ✧ Image/video semantic segmentation
- ✧ Perceptual enhancement
- ✧ Multimodal translation
- ✧ Depth estimation
- ✧ Image/video inpainting
- ✧ Image/video deblurring
- ✧ Image/video denoising
- ✧ Image/video upsampling and super-resolution
- ✧ Image/video filtering
- ✧ Image/video de-hazing, de-raining, de-snowing, etc.



- ✧ Demosaicing
- ✧ Image/video compression
- ✧ Removal of artifacts, shadows, glare and reflections, etc.
- ✧ Image/video enhancement: brightening, color adjustment, sharpening, etc.
- ✧ Style transfer
- ✧ Hyperspectral imaging
- ✧ Underwater imaging
- ✧ Aerial and satellite imaging
- ✧ Methods robust to changing weather conditions / adverse outdoor conditions
- ✧ Image/video manipulation on mobile devices
- ✧ Image/video restoration and enhancement on mobile devices
- ✧ Studies and applications of the above.

### **Program Committee Chairs:**

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