

2017 IEEE Applied Imagery Pattern Recognition Workshop
Call for Papers



AIPR 2017
Big Data, Analytics, and Beyond

Cosmos Club, Washington, D.C.
October 10-12, 2017

Big data analytics have pushed the limits of computational imaging and machine vision, yielding extraordinary results in domains such as:

- Robotics and autonomous systems - unmanned aerial vehicles and self-driving cars
- Big imaging datasets for medical, atmospheric, neurological, and more – in the commercial sector and across the disciplines like connectomics, deep learning, and biologically-inspired AI methods
- Cloud computing - Scalable and inexpensive parallel computational resources both local and in the cloud

The 2017 IEEE AIPR Workshop will explore these reemerging intersections and synergies between imaging and Big Data, continuing the workshop's long tradition of bringing together researchers and developers who span the disciplines and work in labs across academia, industry, and government. The Workshop Committee invites papers that present new techniques, algorithms, analysis, applications, visualizations, systems, and theoretical insights to the interplay between imaging and artificial intelligence. Topics include, but are not limited to, the following:

- Image-based autonomous capabilities in transportation, medicine, robotics, manufacturing, defense, space
- Image understanding: captioning, inference, retrieval, summarization, scene modeling
- Situational awareness: biometrics, surveillance, anomaly detection, environmental monitoring, video analytics, mixed and augmented reality
- Remote sensing: space-time processing, change detection, natural resource monitoring, enabling cloud applications
- Medical and biological applications: diagnosis, intervention, prognosis, teleradiology, global health, scientific discovery
- AI tools for assisted image analysis, deep learning, visualization, performance metrics and evaluation methodologies

Abstracts (150-300 words) are now being accepted through our online submission site:

<https://cmt3.research.microsoft.com/AIPR2017/>. Questions (or if there are problems with the online submission) may be emailed to: Programchair2017@aipr-workshop.org

Deadline for abstracts: 30 June 2017

Program Chairs:

Peter Doucette, US Geological Survey; Robert Pless, George Washington University; John Irvine, Draper

The Workshop will include oral and poster presentations, several keynote talks that provide in-depth overviews of the fields, and a debate between two experts on a fundamental question. Written papers will be required (due after the workshop) and will be indexed in *IEEE Xplore*. AIPR 2017, the 46th annual workshop, is sponsored by the IEEE Computer Society Technical Committee on Pattern Analysis and Machine Intelligence, and organized by the AIPR Workshop Committee with support from sponsors, including Descartes Labs, Draper Laboratory, and Cybernet Systems Corporation.

Updates and additional information can be found at www.aipr-workshop.org