



## In conjunction with ACM MobiCom 2021



# and Intelligent Edges

Third Workshop on

#### **AROUT**

Analyzing live video streams is arguably the most challenging of domains for "systems-for-Al". Unlike text or numeric processing, video analytics require higher bandwidth, consume considerable compute cycles for processing, necessitate richer query semantics, and demand tighter security & privacy guarantees.

Video analytics has a symbiotic relationship with edge compute infrastructure. Edge computing makes compute resources available closer to the data sources. All aspects of video analytics call to be designed "green-field", from vision algorithms, to the systems processing stack and networking links, and hybrid edge-cloud infrastructure. Such a holistic design will enable the democratization of live video analytics such that any organization with cameras can obtain value from video analytics.

### **TOPICS OF INTEREST**

- Low-cost video analytics
- Deployment experience with array of cameras
- Storage of video data and metadata
- Interactive querying of video streams
- Network design for video streams
- Hybrid cloud architectures for video processing
- Scheduling for multi-tenant video processing
- Training of vision neural networks
- Edge-based processor architectures for video processing
- Energy-efficient system design for video analytics
- Intelligent camera designs
- Video analytics on 5G
- Vehicular and drone-based video analytics

- Tools and datasets for video analytics systems
- Novel vision applications
- Video analytics for social good
- Secure processing of video analytics
- Emerging forms of immersive video streams
- Privacy-preserving techniques for video processing

#### **IMPORTANT DATES**

Paper Submissions Deadline: May 21 June 4, 2021 Acceptance Notification: July 1, 2021

Check out http://aka.ms/hotedgevideo21 for details on past editions of the workshop colocated with MobiCom'19 and SIGCOMM'20.