Scalable Crowd-Sourcing of Video from Mobile Devices
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Motivation
- Head-mounted devices are upcoming
- Crowd-sourced videos are valuable

Key Challenges
- Scalability – bandwidth limitation
- User privacy
- How to search efficiently?

System Architecture
- Videos are stored at cloudlets, metadata goes to the cloud

Experimental Results

Uploading to cloudlets
- One AP can support 4-5 users for highest resolution (1080p)

Denaturing
- Throughput and accuracy varies with resolution (1fps – 7fps)

Indexing
- Can index one frame per several seconds

Energy consumption
- Energy consumption increases as WiFi is saturated