CERIAS
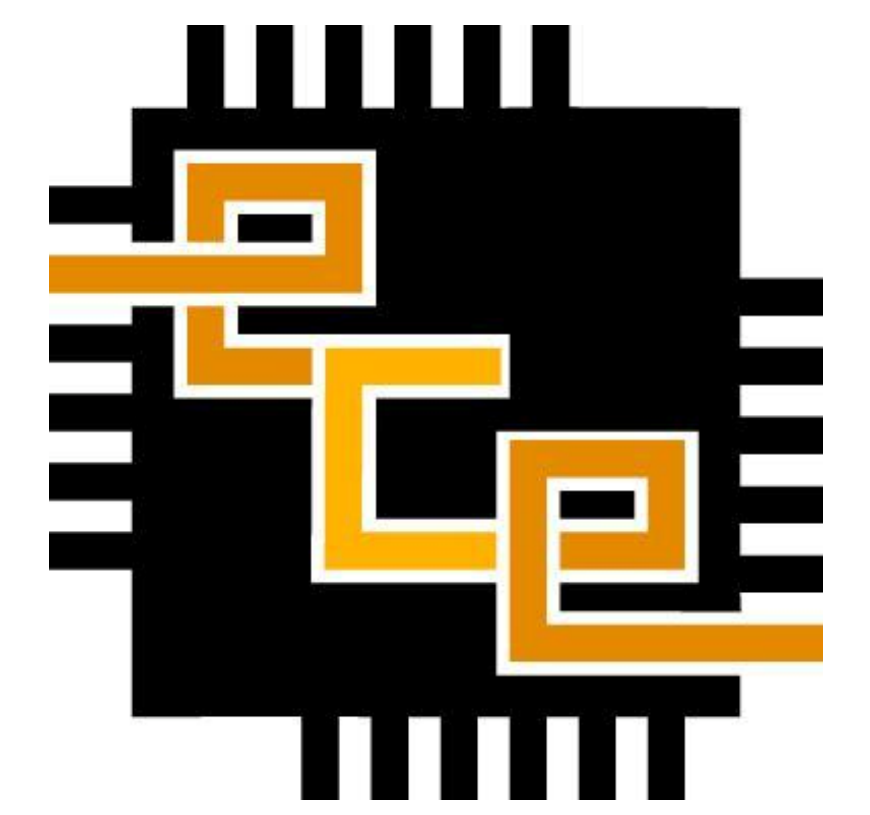The Center for Education and Research in Information Assurance and Security

CONTINUOUS ANALAYSIS OF MANY CAMERAS
Analysis of Visual Data from World Wide Network Cameras

CAM2 IN 2018

- Cloud-based platform for processing visual data from many distributed cameras.
- Provide real-time data (image or video)
- Large variety of ongoing tasks related to image processing, API development, web UI development, database construction, supercomputing, and entrepreneurship.

DATA FROM NETWORK CAMERAS

- More than 200 million network cameras deployed worldwide (IHS Markit) and stream visual data continuously
- CAM2 currently has more than 110,000 cameras in national parks, street intersections, construction sites, tourist attractions ...

RESEARCH TOPICS

- Data management
  - How to find the data? Label the data?
- Resource management
  - Resources needed to process and store?
- Data analysis
  - What information is available in the data?
  - What trends can be observed?

SAMPLE IMAGES

Houston Flood

Alberta Fire

NYC

Tokyo

Seattle

London

COMMERCIALIZATION

- Commercialize in order to have lasting, positive impact on society.
- Large variety of potential applications towards public safety

ENTREPRENEURSHIP

- Perceive Inc.
  - Small Business Innovation Research Grant.
  - Video analytics for retail applications.

PURDUE UNIVERSITY
Discovery Park

CERIAS