CS585: Image and Video Computing
Session 1: Introduction

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Question of the Day:

• What is computer vision and why does anyone think that it is interesting?
Computer Vision

• A branch of computer science concerned with developing information representations and algorithms used to analyze and interpret images and video

• Related fields:
  – Machine Learning / Artificial Intelligence
  – Image Processing
Teaching by Applications

- Object Detection
- Object Recognition
- Object Tracking
- Surveillance
- Study of Collective Motion (my research!)
- Robot Navigation
- Video Stabilization
- Image Mosaics
Segmentation / Object Detection
Object Recognition

Type any name
Object Tracking
Surveillance
Collective Motion
Robot Navigation
Video Stabilization
Image Mosaics
Peer Instruction

- Students discussing the material is more effective than the teacher talking about the material
Discussion Questions

• What are applications of computer vision that you are familiar with?
• What do you hope to learn this semester?
• Why did you decide to take this class?
Syllabus Review and Grading

• Material most important to me is for the projects
• Next most important is for homework and labs
• Next most important is for in-class discussion
• Next is for plain lectures