Lecture:
Course overview
Juan Carlos Niebles and Ranjay Krishna
Stanford Vision and Learning Lab
Today’s agenda

• Introduction to computer vision

• Course overview
Contacting instructor and TAs

• Instructors:
  – Dr. Juan Carlos Niebles
  – Ranjay Krishna

• Teaching Assistants
  – Don Lee, Masters, CS
  – Olivier Moindrot
  – Xiaoyan Wu

• Office hours listed online.
Contacting instructor and TAs

• All announcements, Q&A in Piazza
  – https://piazza.com/stanford/fall2017/cs131

• All course related posts should be public.

• All private correspondences to course staff should post private (instructors only) post on piazza.
  – Use this for personal problems and not for course related material.
Overall philosophy

• Breadth
  – Computer vision is a huge field
  – It can impact every aspect of life and society
  – It will drive the next information and AI revolution
  – Pixels are everywhere in our lives and cyber space
  – CS131 is meant as an introductory course, we will not cover all topics of CV
  – Lectures are mixture of details techniques and high level ideas
  – Speak our “language”

• Depth
  – Computer vision is a highly technical field, i.e. know your math!
  – Master bread-and-butter techniques: face recognition, corners, lines, features, optical flows, clustering and segmentation
  – Programming assignments: be a good coder AND a good writer
  – Theoretical problem sets: know your math!
  – Final Exam: your chance to shine!
Syllabus

• Go to website...
  http://cs131.stanford.edu
Grading policy - homeworks

- Homework 0 (Basics): 4%
- Homework 1 (Filters - Instagram): 8%
- Homework 2 (Edges – smart car lane detection): 8%
- Homework 3 (Panorama - image stitching): 8%
- Homework 4 (Resizing - seams carving): 8%
- Homework 5 (Segmentation - clustering): 8%
- Homework 6 (Recognition - classification): 8%
- Homework 7 (Face detection - Snapchat): 8%
- Homework 8 (Tracking - Optical flow): 8%

All homeworks due on Monday at midnight
Grading policy

• Final Exam: 20%
• Extra Credit: 7%
• Class Notes: 5%
Grading policy - homeworks

• Most assignments will have an extra credit worth 1%. You are expected to get a total of 7% of extra credit points.
  – You can get as many points as you can.

• Late policy
  • 5 free late days – use them in your ways
  • Maximum of 3 late days per assignment
  • Afterwards, 25% off per day late
  • Not accepted after 3 late days per assignment

• Collaboration policy
  • Read the student code book, understand what is ‘collaboration’ and what is ‘academic infraction’
Submitting homeworks

• Homeworks will consist of python files with code and ipython notebooks.

• Ipython notebooks:
  – Will guide you through the assignments.
  – Might contain written questions
  – Once you are done, convert the ipython notebook into a pdf and submit on Gradescope (http://gradescope.com).
    • Access code: M6BYVM

• Python files:
  – All code must be submitted via submission script included in every assignment.
  – Check our course website for details on submissions.

• HW0 and HW1 is live, you can start working on it immediately.
Final exams

• Will contain written questions from the concept covered in class or any questions in the homeworks.

• Can require you to solve technical math problems.
Class notes

• We, as a class, will generate study notes for everyone.
  – 5% of your grade
• Sign up to create notes for a lecture here:
  – https://github.com/StanfordVL/CS131_notes
• All notes will be due within 1 week of the start of the class.
  – Ex, notes for Tuesday will be due the next Tuesday before class starts.
• All notes will be in Latex.
• This is a group effort: Work together with your teammates to create the notes!!