EE368/CS232 Organisation

- Online course – no classroom lectures
- Not a MOOC – exclusively for Stanford students
- Weekly problem session: Tu 3:15pm-4:05pm in Thornton 102
- Office hours
  - Bernd Girod: We 2:15-3:45 p.m., Packard 373
  - David Chen, Fr 4:00-6:00 p.m., Packard 021 (SCIEN Lab)
  - Matt Yu, Th 4:00-6:00 p.m., Packard 021 (SCIEN Lab)
- Class Piazza page:

  http://piazza.com/class#fall2013/ee368

EE368/CS232 Organisation

- Release of lecture videos with embedded quizzes, every Monday for 7 weeks
- Weekly homework assignments corresponding to video modules,
  due one week later, require computer + Matlab, solve individually
- First release on September 23 (first day of class)
- Late Midterm
  - 24-hour take-home exam
  - 3 slots, **November 13-16**

EE368/CS232 Final Project

- Individual or group project, plan for about 50-60 hours per person
- Develop, implement and test/demonstrate an image processing algorithm
- Project proposal due: **October 23, 11:59 p.m.**
- Project presentation: Poster session, **December 6, 4-6:30 p.m.**
- Remote SCPD students can alternatively submit a narrated video presentation
- Submission of written report and source code:
  December 6, 11:59 p.m.

EE368/CS232 Grading

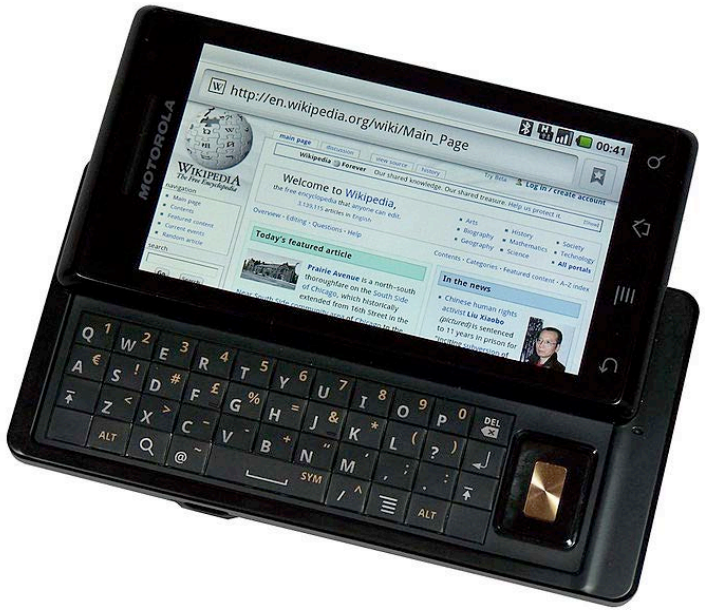
- Participation: 10%
  (Online videos, quizzes, discussion forum)
- Homeworks: 20%
- Midterm: 30%
- Final project: 40%
- No final exam.

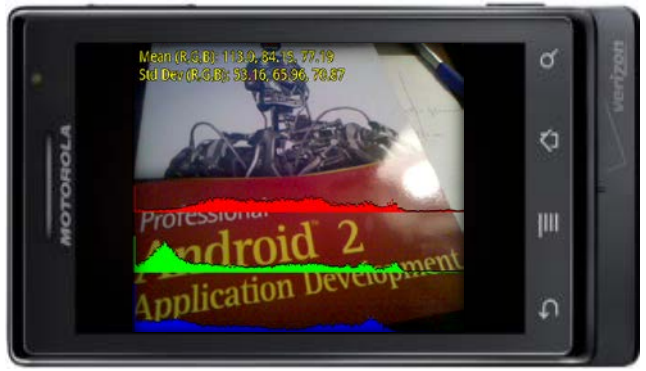
SCIEN Laboratory

- SCIEN = Stanford Center for Image Systems Engineering (http://scien.stanford.edu)
- Exclusively a teaching laboratory
- Location: Packard room 021
- 20 Linux PCs, scanners, printers etc.
  - Matlab with Image Processing Toolbox
  - Android development environment
- Access:
  - Door combination for lab entry will be provided by TA
  - Account on SCIEN machines will be provided to all enrolled in class

Mobile image processing (optional)

- 40 Motorola DROID cameraphones available for class projects (must be returned after, sorry)
- Lectures on Android image processing in first three weeks
- Android development environment on your own computer or in SCIEN lab
- Programming in Java (C++ for OpenCV)





Reading

- Slides available as pdf files on the class website (click on  for source code and data)
  https://class.stanford.edu/courses/Engineering/EE368/Digital_Image_Processing/about
- Popular text books
  - R. C. Gonzalez, R. E. Woods, „Digital Image Processing,“ 3rd edition, Prentice-Hall, 2008, $186.– ($147 on Amazon).
  - A. K. Jain, „Fundamentals of Digital Image Processing,“ Prentice-Hall, Addison-Wesley, 1989, $186.– ($141 on Amazon).
- Software-centric books
  - R. C. Gonzalez, R. E. Woods, S. L. Eddins, „Digital Image Processing using Matlab,“ 2nd edition, Pearson-Prentice-Hall, 2009, ca. $ 140.--.
  - G. Bradski, A. Kaehler, „Learning OpenCV,“ O‘Reilly Media, 2008, $ 50.00.
- Comprehensive state-of-the-art
  - Al Bovik (ed.), „The Essential Guide to Image Processing,“ Academic Press, 2009, $ 92.95.
- Journals/Conference Proceedings
  - IEEE Transactions on Image Processing
  - IEEE International Conference on Image Processing (ICIP)
  - IEEE Computer Vision and Pattern Recognition (CVPR)