

CIS 580 Homework 1

Due: Monday

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Camera Model

CCD of iPhone 6

The iPhone uses a sony isx014 cmos sensor with a 4.6 mm diagonal. Most likely dimensions are close to 3.67 mm x 2.76 mm.

source: http://www.sony.net/Products/SC-HP/cx_news_archives/img/pdf/vol_70/isx014.pdf

Sensor Pixel Resolution

Pixel resolution is approximately 8.08 Megapixels 7.21 pixels per μm^2 and pixel size = $1.12 \mu\text{m}^2$

Focal Length

iPhone focal length for the iPhone6 is 29 mm

Measurement

TODO:

Locate camera optical center by converging lines