

What to prepare before the upcoming interview?

In order to best prepare for your interview, here are some materials that we found very useful. You are expected to have a basic familiarity of these topics. The more you understand the domain knowledge, the more likely you will do better in the interview. But don't worry if you found the content too much to grasp in a week or two. **We fully understand your concern and therefore we are not only looking for how much you know, but also how fast you learn.**

Looking forward to seeing you in the interview. Good luck!

Camera related:

<https://web.stanford.edu/class/cs231m/lectures/lecture-11-camera-isp.pdf>

http://www.cs.cmu.edu/afs/cs/academic/class/15869-f11/www/lectures/16_camerapipeline1.pdf

http://graphics.cs.cmu.edu/courses/15-463/2017_fall/lectures/lecture2.pdf

Computational photography

<http://www.cs.cornell.edu/courses/cs6640/2012fa/slides/01-History.pdf>

https://www.eecs.yorku.ca/~mbrown/ICCV19_Tutorial_MSBBrown.pdf

<https://graphics.stanford.edu/talks/compphot-publictalk-may08.pdf>

<https://graphics.stanford.edu/talks/camera20-public-22jun11.pdf>

http://graphics.cs.cmu.edu/courses/15-463/2010_spring/Lectures/postmodern.pdf

In addition to these materials, you may expect questions like these,

1. How to blur an image?
2. When training a neural network, and if it is not working as expected. What to do next?
3. What are the pros and cons of using L1 loss v.s. Perceptual loss (VGG loss, e.g.)?
4. How to tell if a model overfits the training data?

Engineering question examples

5. How to do a matrix multiplication of two 3x3 matrices in python or in C++?
6. If you have experience developing algorithms (median filter, e.g.) on mobile devices (SSE / OpenCL / DSP), it's a big plus.