

Lecture 3 Report Requirement

The report only needs to answer the questions below.

Send your report in PDF format to 1430090453@qq.com, named as "report3_[first name][last name].pdf" (e.g., report3_ZhangChen.pdf). Please also include your name (both English and Chinese) in the report. The report is due on 10 am, China Standard Time, April 13, 2020.

Report Questions:

"High Performance Imaging Using Large Camera Arrays"

1. What is the process of color correction?
2. How can we create HDR Image Mosaics?
3. What is the major challenge of spatiotemporal sampling?
4. How can we see through an occluder by camera arrays?
5. How to photograph a fast-moving object embedded in a wide depth of field scene by camera arrays?

"PiCam: An Ultra-Thin High Performance Monolithic Camera Array"

1. List at least 2 differences between a legacy camera and the PiCam.
2. Why each camera is only sensitive to only one spectral color?
3. Why the authors choose the filter pattern of the sensor array as the Figure 2(c) shows?
4. What are the 4 steps in Superresolution and Image Restoration?
5. What's the advantages of a narrow microlens?