

# **Computer Vision**

## **Spring 2018**

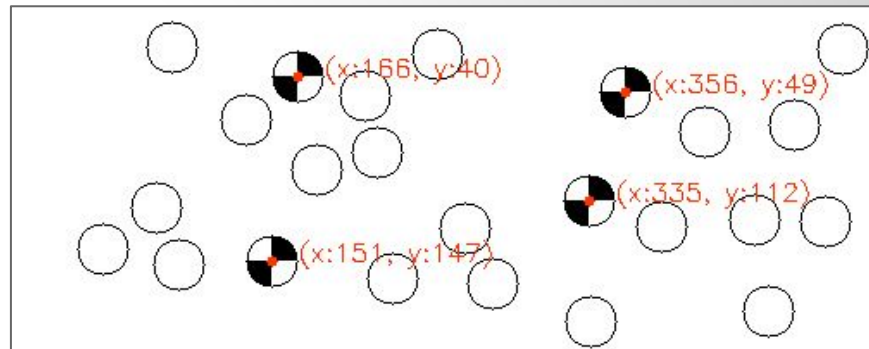
### **Problem Set #3**

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# 1: Marker detection

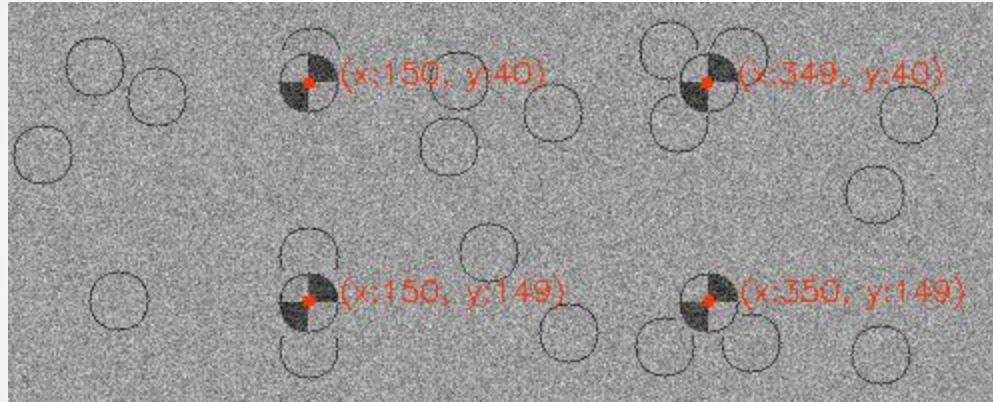


ps3-1-a-1.png



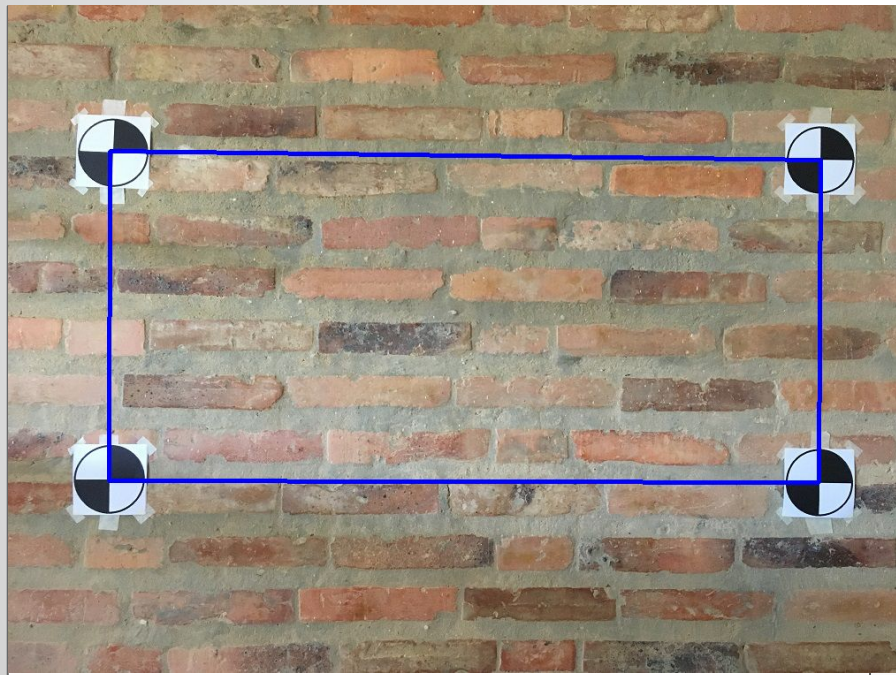
ps3-1-a-2.png

# 1: Marker detection (cont.)

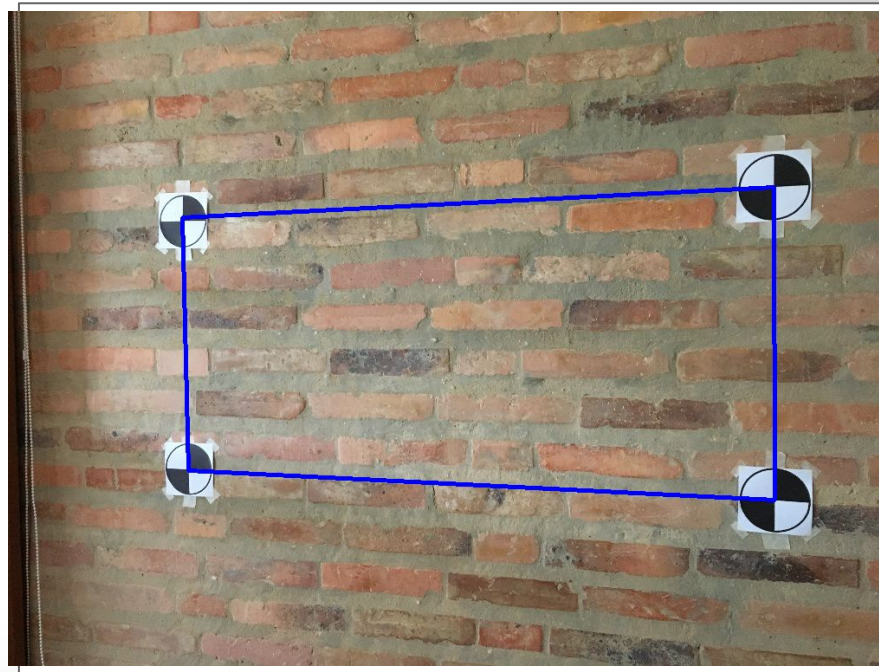


ps3-1-a-3.png

## 2: Marker detection (wall scene)



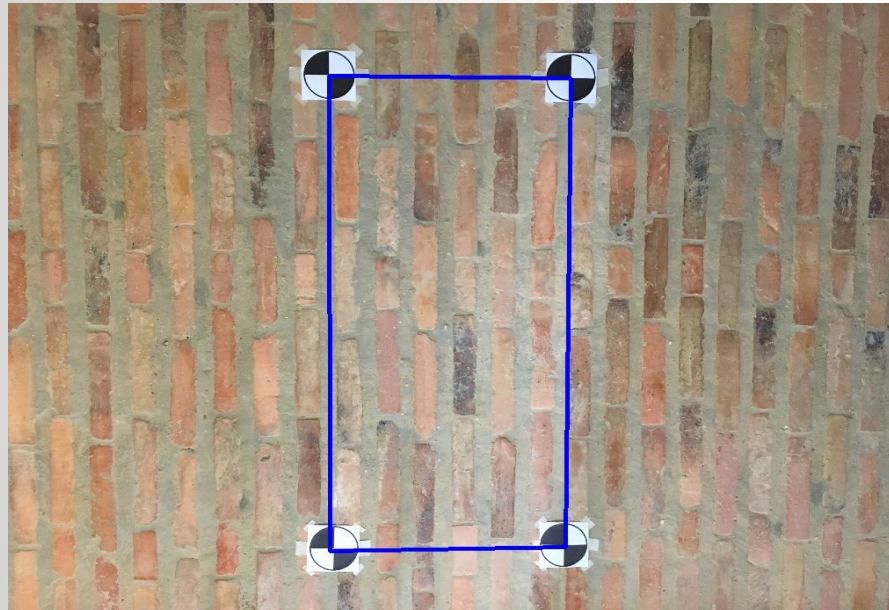
ps3-2-a-1.png



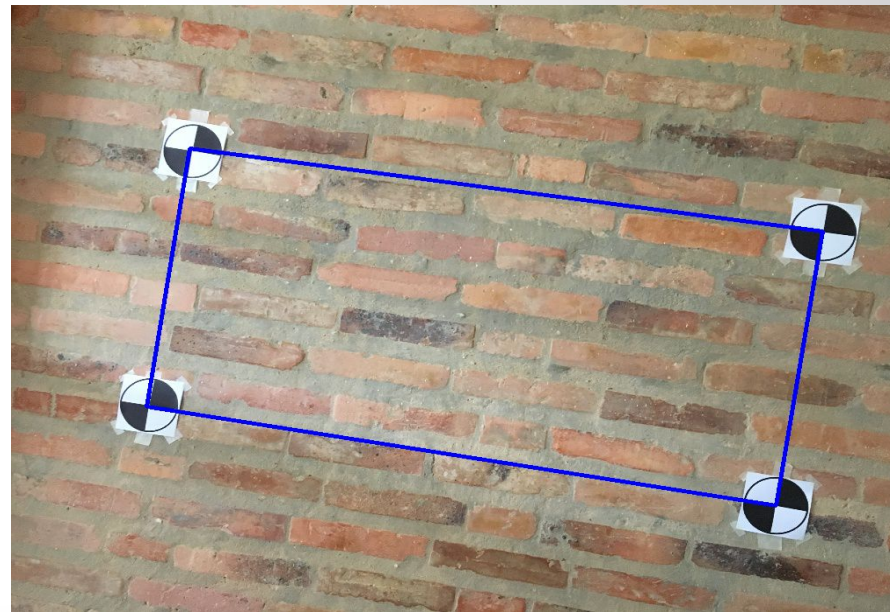
ps3-2-a-2.png



## 2: Marker detection (wall scene)

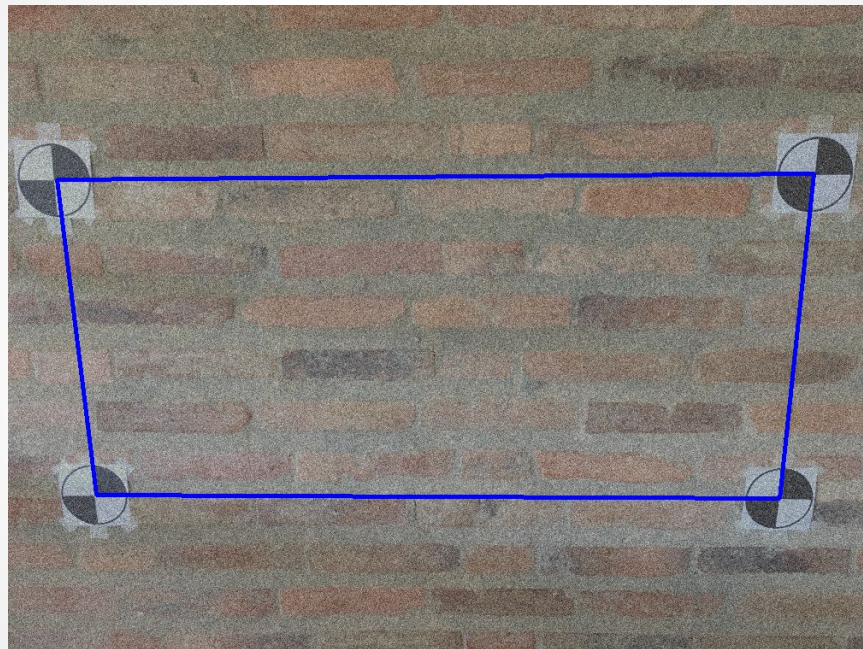


ps3-2-a-3.png



ps3-2-a-4.png

## 2: Marker detection (wall scene)



ps3-2-a-5.png



# 3: Projective Geometry



ps3-3-a-1.png



ps3-3-a-2.png

### 3: Projective Geometry (cont.)



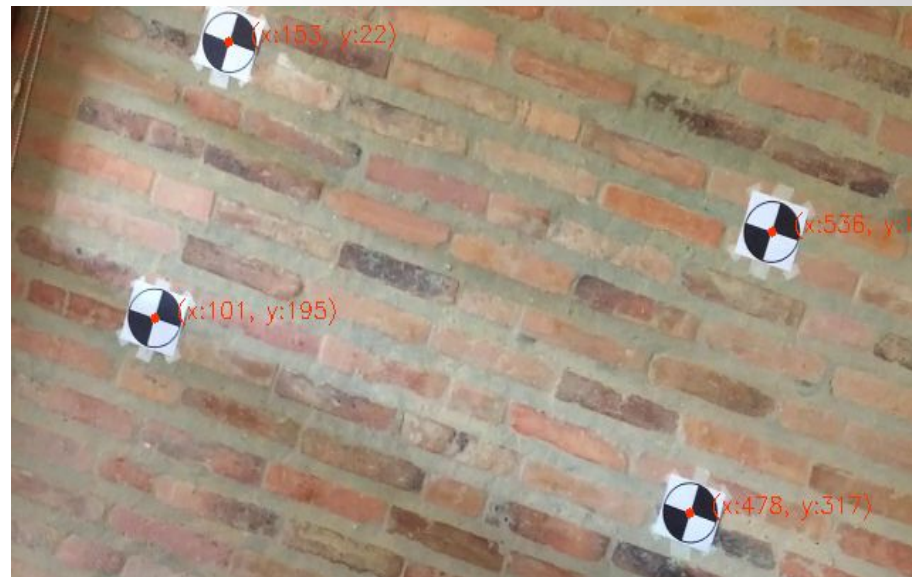
ps3-3-a-3.png



# 4: Markers in Video



ps3-4-a-1.png



ps3-4-a-2.png

## 4: Markers in Video (cont.)



Youtube / Dropbox / etc. link:

<https://www.youtube.com/watch?v=aclds73K1Z0>

ps3-4-a-3.png

## 4: Markers in Video (cont.)



ps3-4-a-4.png



ps3-4-a-5.png



# 4: Markers in Video (cont.)



Youtube / Dropbox / etc. link:

<https://www.youtube.com/watch?v=Bc4l4akdWUk>

ps3-4-a-6.png

# 4: Markers in Video



ps3-4-b-1.png



ps3-4-b-2.png

# 4: Markers in Video (cont.)



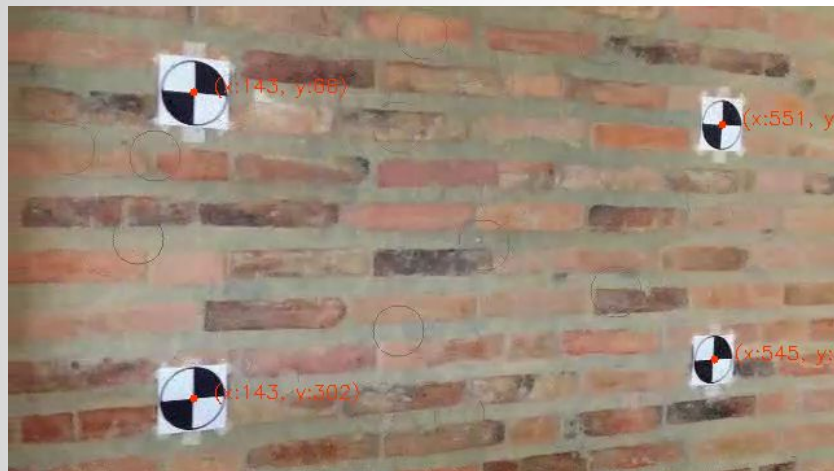
Youtube / Dropbox / etc. link:

[https://www.youtube.com/watch?v=Q6JZ8\\_mRGVM](https://www.youtube.com/watch?v=Q6JZ8_mRGVM)

ps3-4-b-3.png



## 4: Markers in Video (cont.)



ps3-4-b-4.png



ps3-4-b-5.png

# 4: Markers in Video (cont.)



Youtube / Dropbox / etc. link:

<https://www.youtube.com/watch?v=oPNPtb1n3YY>

ps3-4-b-6.png

# 5: AR in Video



ps3-5-a-1.png



ps3-5-a-2.png



# 5: AR in Video (cont.)



Youtube / Dropbox / etc. link:

<https://www.youtube.com/watch?v=93QbcK-NKaA>

ps3-5-a-3.png

## 4: AR in Video (cont.)



ps3-5-a-4.png



ps3-5-a-5.png

# 5: AR in Video (cont.)



Youtube / Dropbox / etc. link:

<https://www.youtube.com/watch?v=gRK3-fjjdoo>

ps3-5-a-6.png



# 5: Markers in Video



ps3-5-b-1.png



ps3-5-b-2.png

# 5: Markers in Video (cont.)



Youtube / Dropbox / etc. link:

<https://www.youtube.com/watch?v=TmOJJwt1300>

ps3-5-b-3.png

## 5: Markers in Video (cont.)



ps3-5-b-4.png



ps3-5-b-5.png



# 5: Markers in Video (cont.)



Youtube / Dropbox / etc. link:

<https://www.youtube.com/watch?v=0bRAu7Xo7NA>

ps3-5-b-6.png

# 6: Video in Video



ps3-6-a-1.png



ps3-6-a-2.png

# 6: Video in Video (cont.)



Youtube / Dropbox / etc. link:

<https://www.youtube.com/watch?v=SGkfqE1c3Dw>

ps3-6-a-3.png



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