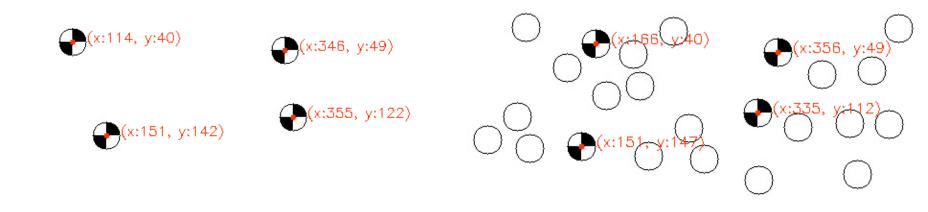
# Computer Vision Spring 2018 Problem Set #3

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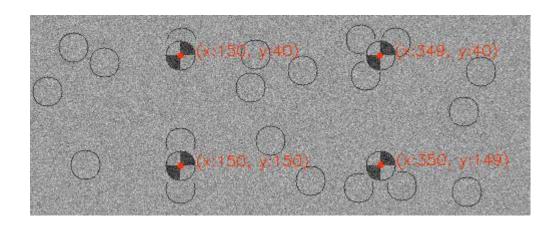
### 1: Marker detection



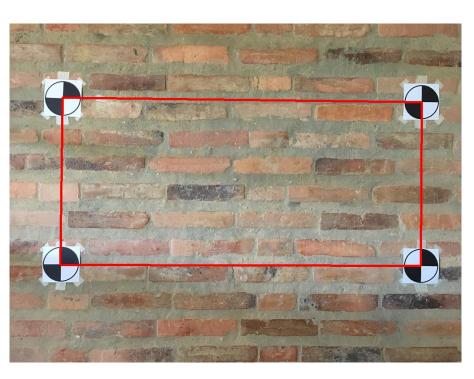
ps3-1-a-1.png

ps3-1-a-2.png

### 1: Marker detection (cont.)



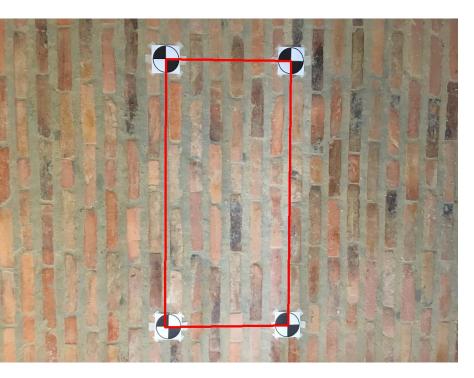
# 2: Marker detection (wall scene)

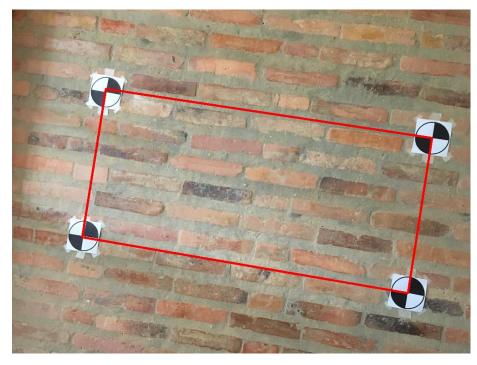




ps3-2-a-1.png ps3-2-a-2.png

# 2: Marker detection (wall scene)

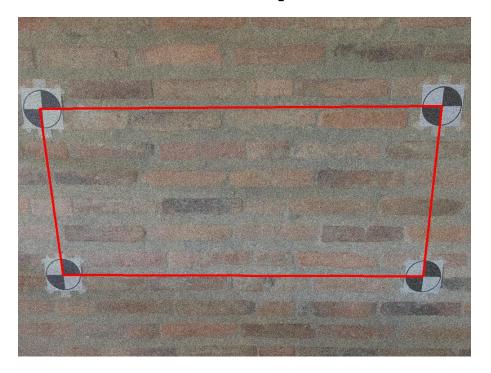




ps3-2-a-3.png

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







#### Youtube / Dropbox / etc. link:

https://www.dropbox.com/s/zrwt4e7h0e4hzwd/ar\_4-a-ps3-4-a.avi?dl=0







#### Youtube / Dropbox / etc. link:

https://www.dropbox.com/s/s2utxswnxjk28qz/ar\_4-a-ps3-4-b.avi?dl=0

ps3-4-a-6.png

### 4: Markers in Video





ps3-4-b-1.png

ps3-4-b-2.png



#### Youtube / Dropbox / etc. link:

https://www.dropbox.com/s/k3p2yovd82di 3sy/ar 4-b-ps3-4-c.avi?dl=0

ps3-4-b-3.png





#### Youtube / Dropbox / etc. link:

https://www.dropbox.com/s/9e8hvz42jamzc9t/a r\_4-b-ps3-4-d.avi?dl=0

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.dropbox.com/s/xzr0ujnf0l95195/a r\_5-a-ps3-4-a.avi?dl=0

ps3-5-a-3.png

# 4: AR in Video (cont.)





ps3-5-a-4.png

# 5: AR in Video (cont.)



#### Youtube / Dropbox / etc. link:

https://www.dropbox.com/s/9u270c72s1pevv6/a r\_5-a-ps3-4-b.avi?dl=0

ps3-5-a-6.png

### 5: Markers in Video





ps3-5-b-1.png

ps3-5-b-2.png



#### Youtube / Dropbox / etc. link:

https://www.dropbox.com/s/dubqal5vsftjnlz/ar\_5-b-ps3-4-c.avi?dl=0

ps3-5-b-3.png





ps3-5-b-4.png

ps3-5-b-5.png



#### Youtube / Dropbox / etc. link:

https://www.dropbox.com/s/96nyon1g9amytvm/ar\_5-b-ps3-4-d.avi?dl=0

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.dropbox.com/s/a5lpgevr4z8jm79/ar\_6-a-ps3-4-a.avi?dl=0

ps3-6-a-3.png