

# Augmented Reality Costume

Specially for *Hack and Tell* event

Aurelijus Banelis



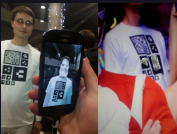
# Aurelijus Banelis

Software developer  
[aurelijus.banelis.lt](http://aurelijus.banelis.lt)  
[aurelijus@banelis.lt](mailto:aurelijus@banelis.lt)



# Augmented Reality Costume

# Context



# Christmas party: Dress code: Future



# Others: Rent costume



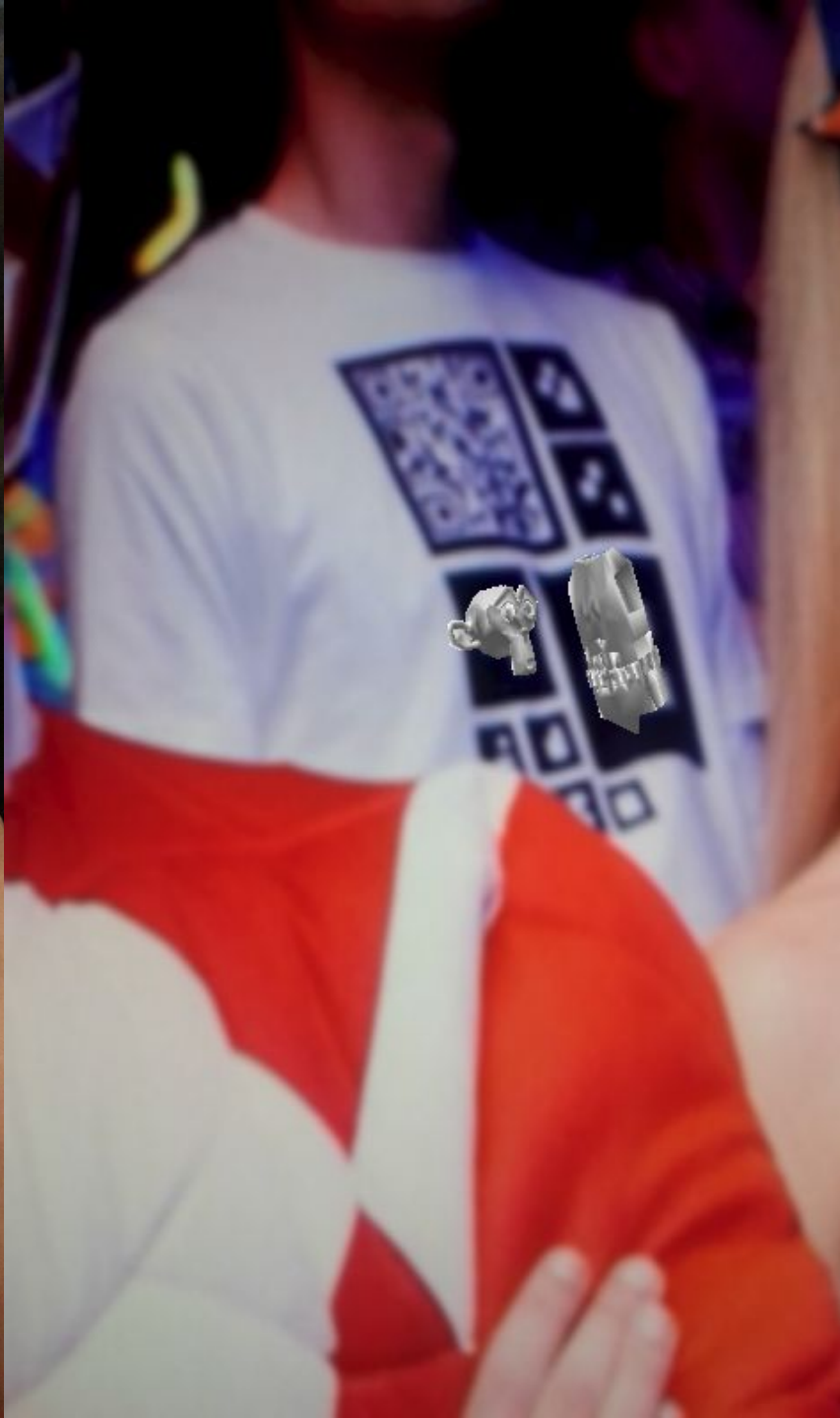
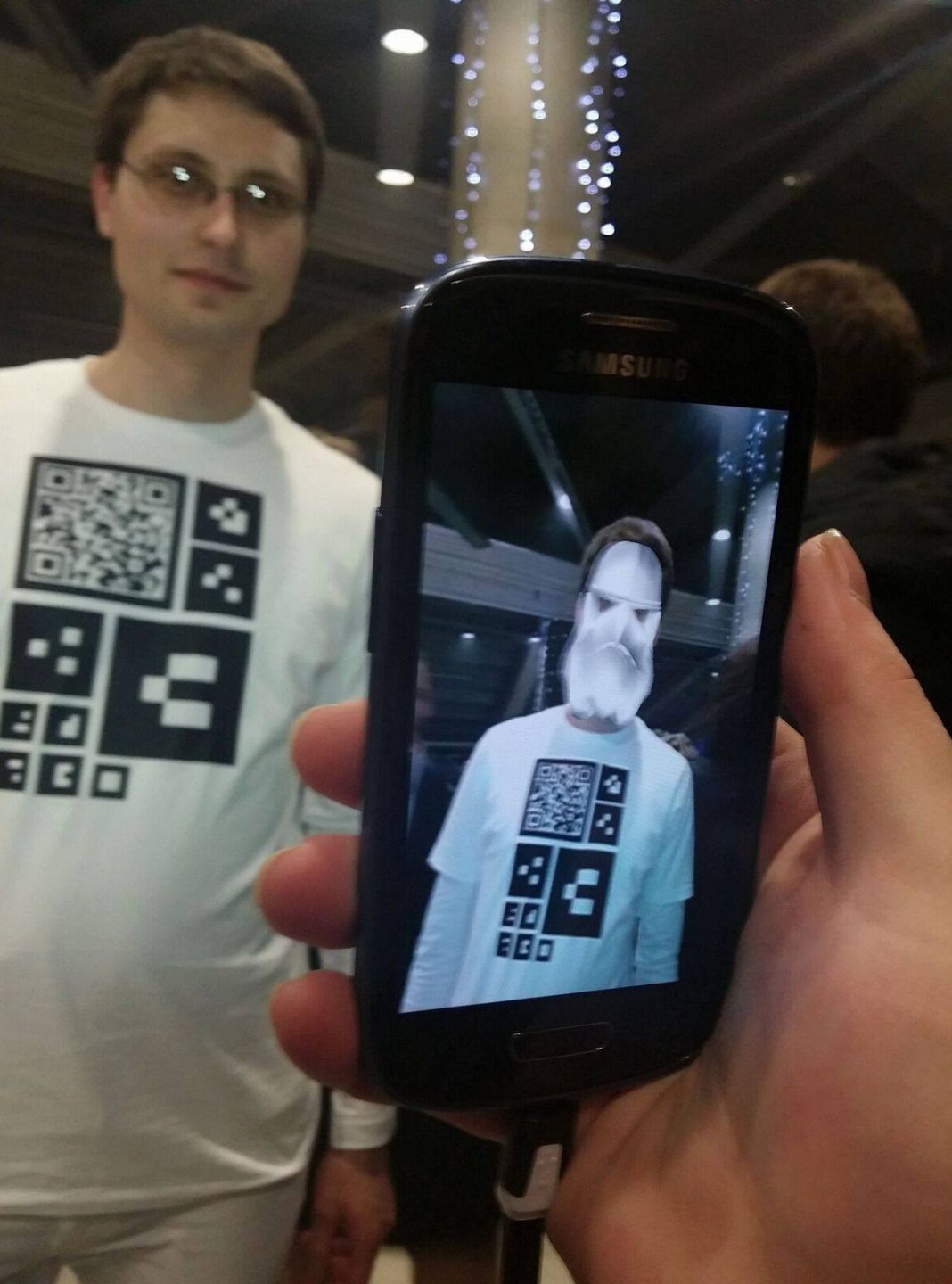
# Others: Fosfor paint



**Not geekish  
enough**



**From**  
**“Dynamic costume”**  
**to**  
**“Augmented reality”**



# Knowledge to share

Augmented  
Reality



# Behind the scenes

**ARToolKit**

Wraps computer vision, starting point

**Android (SDK)**

Custom logic (e.g. helmet position)

**Blender**

Generating 3D models

**QR + Server**

Telling, how to find application

**Draw on fabric**

Some shops requires vector images

# Including redundancy



Low light

Low resolution

Folding

Similarity

if marker1 and marker2





Questions?

# References and useful links

- <http://aurelijus.banelis.lt/presentations/augmetned-reality-2015/ag-costume.pdf>
- <https://youtu.be/Klafn8hFi8c?t=4m41s>
- <http://ftp.osuosl.org/pub/fosdem/2016/h2215/cytomine-a-web-platform-for-collaborative-analysis-of-multi-gigapixel-images-with-machine-learning.mp4>
- <http://desscode.com/>
  
- [https://en.wikipedia.org/wiki/Augmented\\_reality](https://en.wikipedia.org/wiki/Augmented_reality)
- <http://artoolkit.org/>
- <https://github.com/Itseez/opencv>
- O'REILLY Learning OpenCV
- [https://en.wikipedia.org/wiki/Scale-invariant\\_feature\\_transform](https://en.wikipedia.org/wiki/Scale-invariant_feature_transform)
- [https://en.wikipedia.org/wiki/Normal\\_%28geometry%29](https://en.wikipedia.org/wiki/Normal_%28geometry%29)
- <https://unity3d.com/>
- <https://www.blender.org/>
- <https://inkscape.org/en/>