## Face3D

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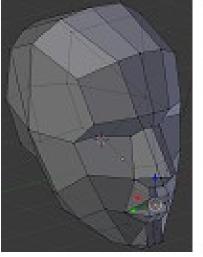


# Goal

















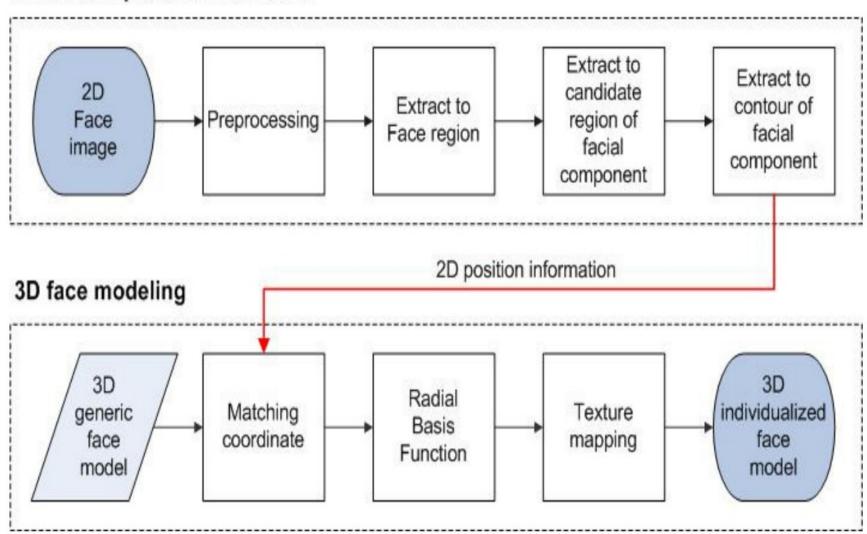




### Pipeline



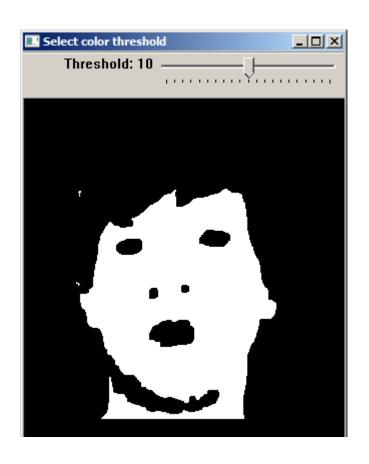
#### **Facial components extraction**

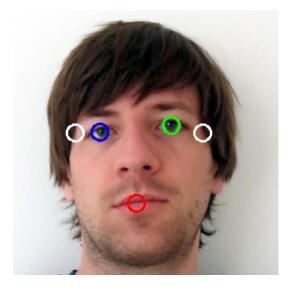


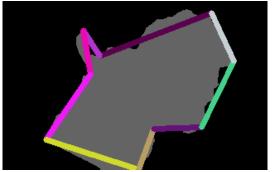
#### Detection (1)



- Detect skin: threshold in YCrCb color space
- Find facial components (mouth, eyes, ...)









#### Detection (2)



- calculate 3d positions (eyes, mouth, ...)
- create textures
  - align front and side texture
- output data for modelling program



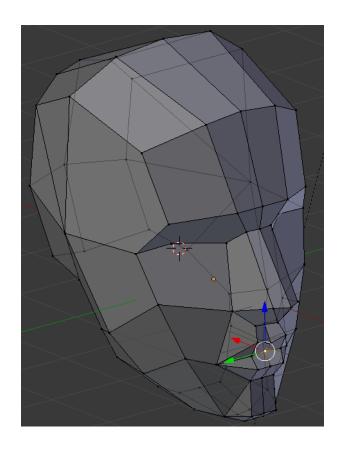




#### Generic model



- Open source face model, edited with Blender
- Kind of vertex labelling (e.g. nose) needed





#### Modelling



- adjust model:
  - according to proportions
  - move facial components:
    - nose, mouth, ...
- **Texturing** 
  - cylinder mapping
  - linear blending
  - perfect adjustment possible
    - position of components in textures is known





#### **Demonstration of Face3d...**

