

Project Update

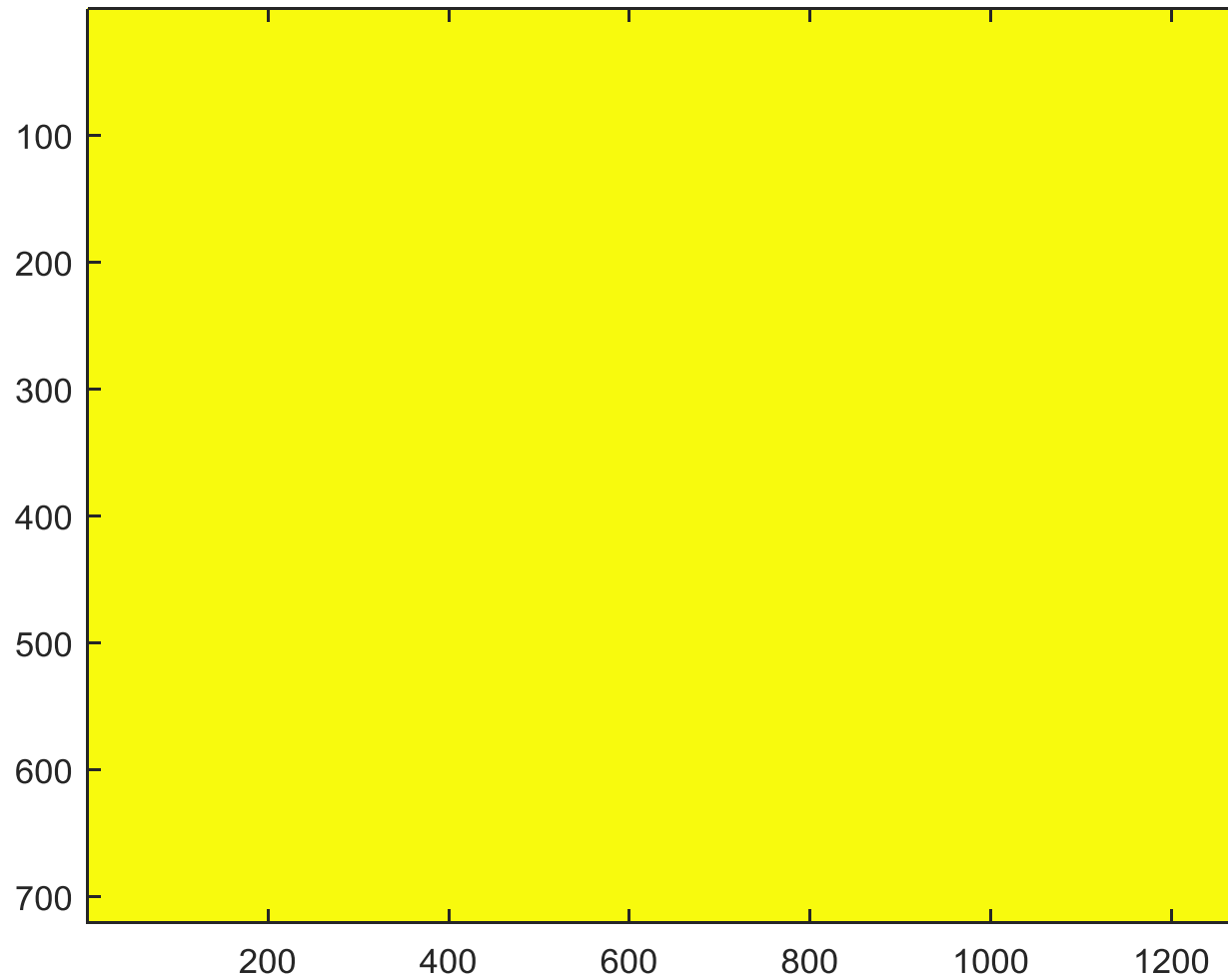
Xitong Yang

July 23

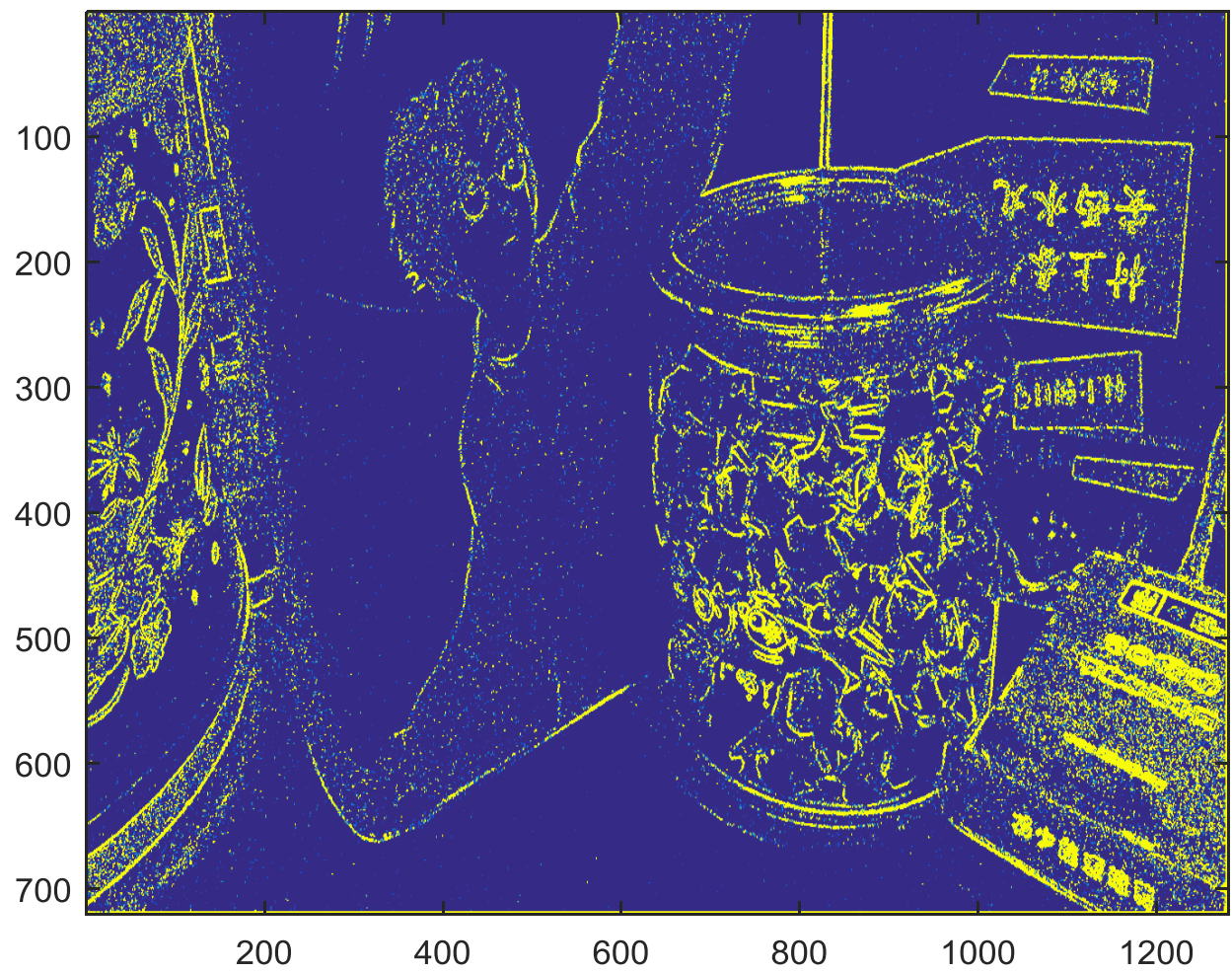
Progress

- Fix many bugs
 - Calculation of textureiness probability
 - Spatial fusion
 - Bug in calling rgb2gray function
- Result
 - More rigid
 - Much more efficient

Before



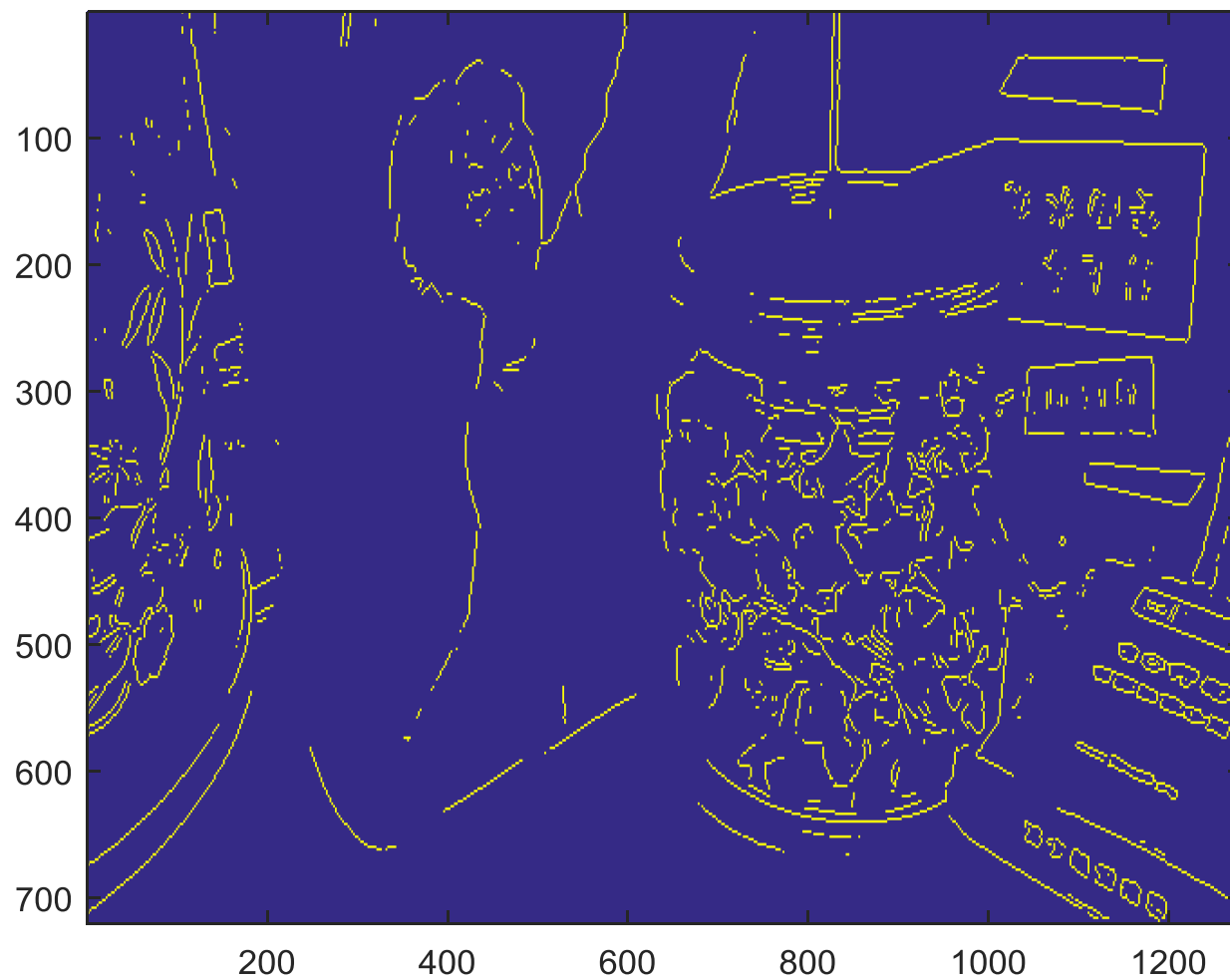
After



Confusing

The textureness probability p_{tex} is computed by a sigmoid function $1/(1 + \exp(-5 \times (g/\sigma - 3)))$, in which g is the maximum absolute difference between the pixel and its 4 neighbors, and σ is the estimated standard deviation of noise. For efficiency, we estimate σ by computing the standard deviation of pixels differences between the median image and the reference image within the flat (non-textured) areas. On these areas, the median image (generated

EdgeMap



Example

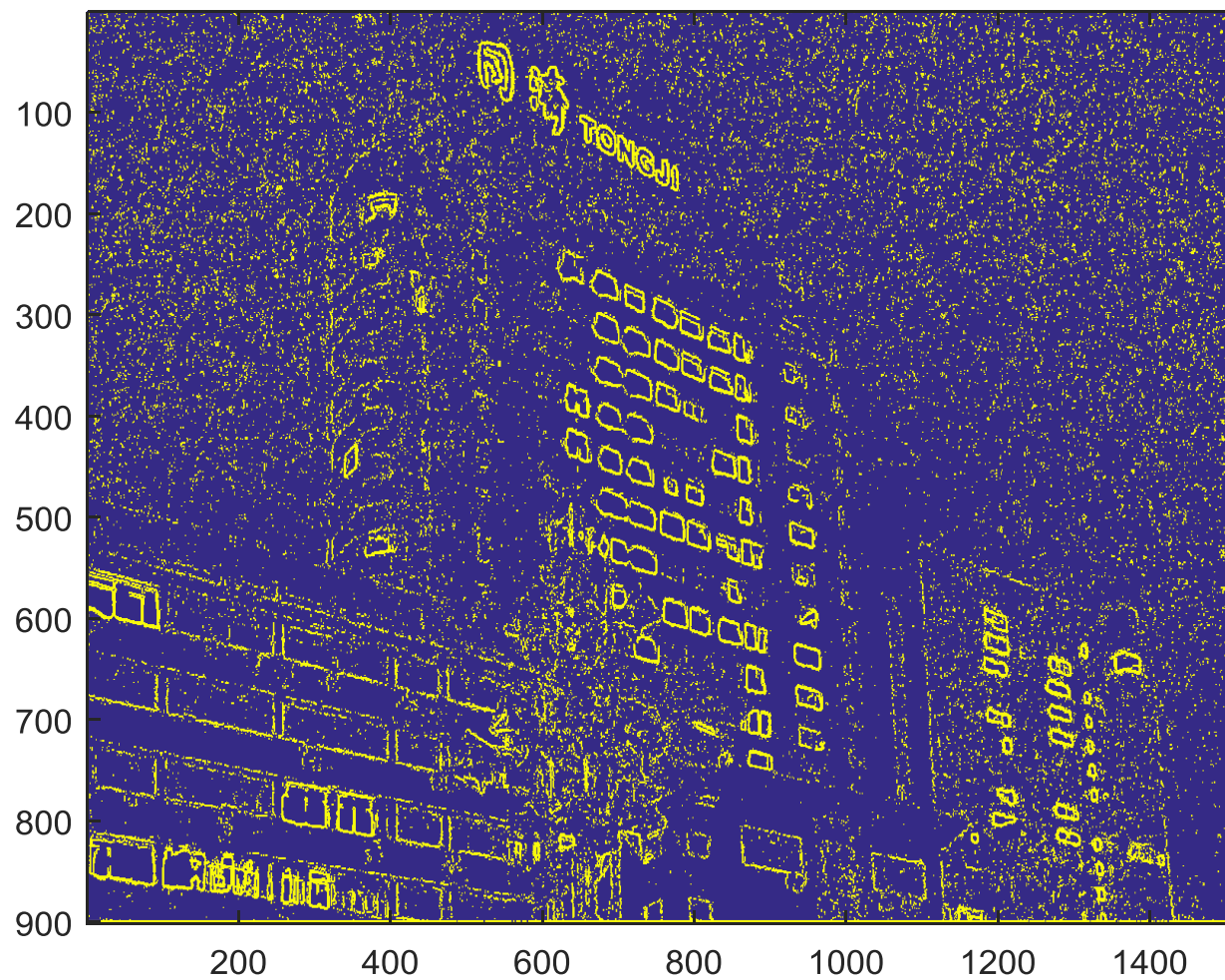
Original



Temporal only



Texture points ($p_{\text{tex}} > 0.01$)



Temporal only



Final



Final



Before



Now



Next step

- Wait for author's reply about the confusing part
- Tune the parameters
- More implementation details