

Artistic blurring of background in portrait photos



Comp Photography
Final Project

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Spring 2017

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Showcase

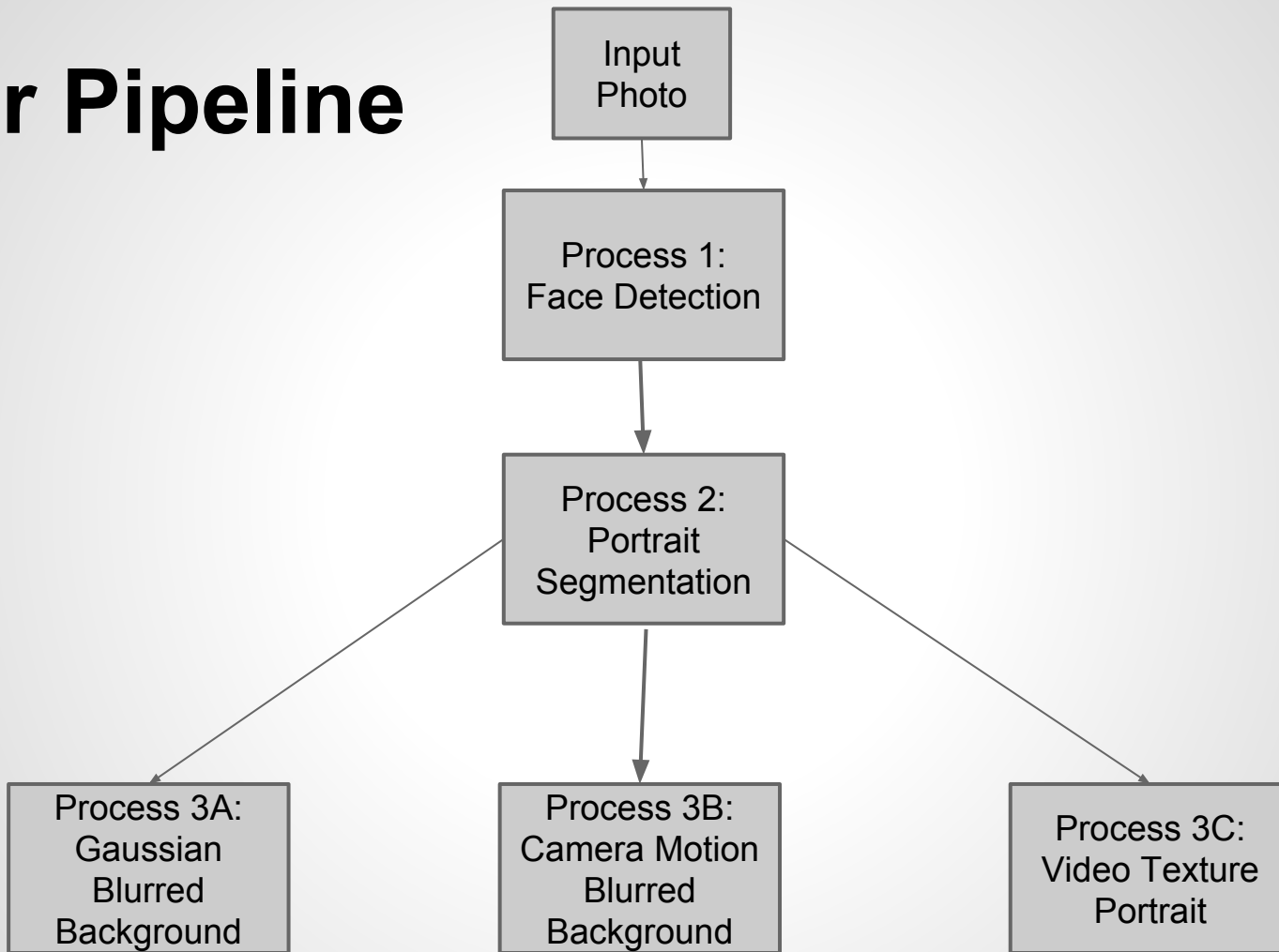


Input



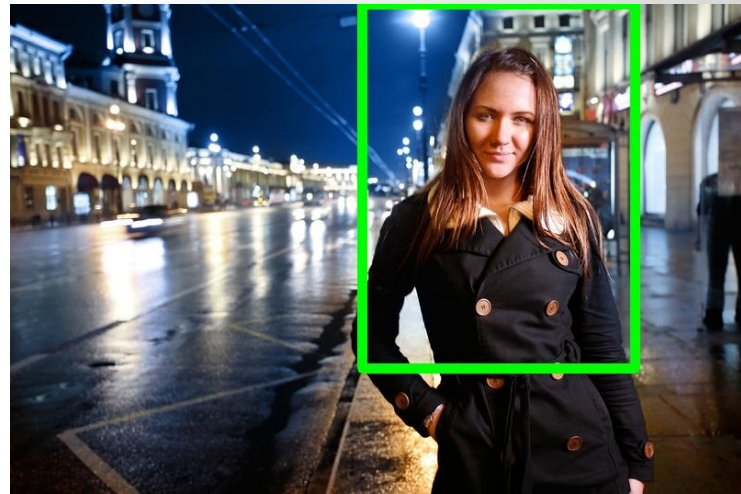
Output

Your Pipeline



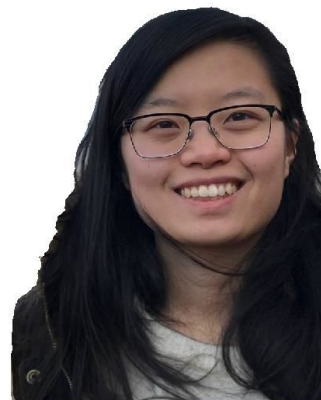
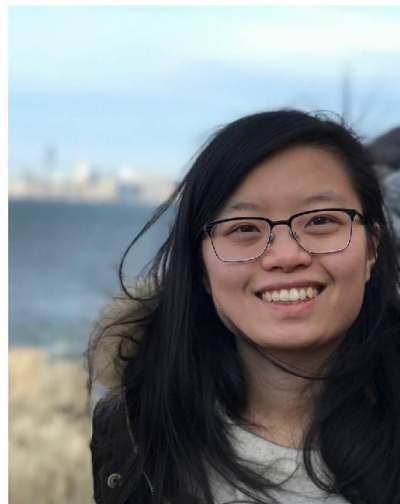
Demonstration: Result Sets (cont'd)

- **Face Detection:**



Demonstration: Result Sets (cont'd)

- **Portrait Segmentation:** Automatic portrait segmentation for image stylization. Shen, X et al. (2016, May)



Demonstration: Result Sets (cont'd)

- **Portrait Segmentation:**



Demonstration: Result Sets (cont'd)

- Gaussian Blur:



Demonstration: Result Sets (cont'd)

- **Motion Blur:** We generated motion blur in four directions: horizontal, vertical, and two diagonals.



Diagonal Left



Vertical



Horizontal



Diagonal Right

*Input image can be found in slide 3.

Linear Motion Filter

1	1	1

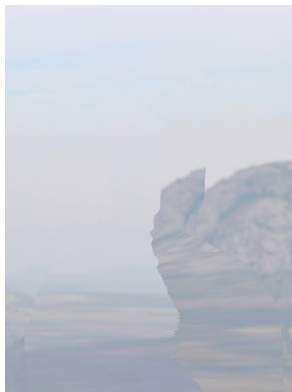
Project Development



Defective
gaussian blur



Defective motion
blur



In painted image



Corrected
gaussian blur



Corrected motion
blur

Demonstration: Result Sets (cont'd)

- **Video Texture:**

Original video from [3]

GIF available at:

<https://drive.google.com/file/d/0B08QPrtGu0IpN18zRXpjWmdnRFk/view?usp=sharing>



Demonstration: Result Sets (cont'd)

- **Video Texture:**

Original video from [2]

GIF available at:

<https://drive.google.com/file/d/0B08QPrtGu0lpeDgxN3c0RFgxS28/view?usp=sharing>



Resources

[1] Shen, X., Hertzmann, A., Jia, J., Paris, S., Price, B., Shechtman, E., & Sachs, I. (2016, May). Automatic portrait segmentation for image stylization. In Computer Graphics Forum (Vol. 35, No. 2, pp. 93-102).

[2] Abstract Bokeh Pan [video], Pexels videos.

<https://videos.pexels.com/videos/abstract-bokeh-pan-380>

[3] Blurred Video Of Different Vehicles [video], Pexels videos.

<https://videos.pexels.com/videos/blurred-video-of-different-vehicles-1138>

[4] Time Lapse Video of Waterfalls [video], Pexels videos.

<https://videos.pexels.com/videos/time-lapse-video-of-waterfalls-906>

[5] GIF Maker, gifmaker.me

[6] <http://www.exposureguide.com/images/cityscape-photography-tips/photographing-cityscapes-4e.jpg>

Thank you!

Questions?