Yuting Yang General Exam Spring 2020

TENTATIVE READING LIST:

Denoising:

- 1. [Vogels 2018], Denoising with Kernel Prediction and Asymmetric Loss Functions
- 2. [Dorn 2015], Towards Automatic Band-Limited Procedural Shaders

Image Processing + NN:

- 3. [Chen 2017], <u>Fast Image Processing with Fully-Convolutional Networks</u>
- 4. [Gharbi 2017], Deep Bilateral Learning for Real-Time Image Enhancement
- 5. [Li 2018], <u>Differentiable Programming for Image Processing and Deep Learning in Halide</u> (DSL and compiler, like ours)
- 6. [Thies 2019], <u>Deferred Neural Rendering: Image Synthesis using Neural Textures</u>
- 7. [Zhang 2018], The Unreasonable Effectiveness of Deep Features as a Perceptual Metric

GANs:

- 8. [Wang 2018], <u>High-Resolution Image Synthesis and Semantic Manipulation with Conditional GANs</u>
- 9. [Wang 2018], Video-to-Video Synthesis

Program Simplification:

- 10. [Sidiroglou 2011], Managing Performance vs. Accuracy Trade-offs With Loop Perforation
- 11. [Sitthi-amorn 2011], Genetic Programming for Shader Simplification

Textbook:

12. [Goodfellow 2016], Deep Learning