PAPER LIST

Instructor: Aykut Erdem

March 9: Autoregressive Models

ATISS: Autoregressive Transformers for Indoor Scene Synthesis

Despoina Paschalidou, Amlan Kar, Maria Shugrina, Karsten Kreis, Andreas Geiger, Sanja Fidler. NeurIPS 2021.

March 16: Normalizing Flow Models

Conditional Invertible Neural Networks for Diverse Image-to-Image Translation

Lynton Ardizzone, Jakob Kruse, Carsten Lth, Niels Bracher, Carsten Rother, Ullrich Kthe. arXiv Preprint arXiv:2105.02104, 2021.

March 23: Variational Autoencoders

Playable Video Generation

Willi Menapace, Stephane Lathuiliere, Sergey Tulyakov, Aliaksandr Siarohin, Elisa Ricci. CVPR 2021.

March 30: Generative Adversarial Networks I

Taming Visually Guided Sound Generation

Vladimir Iashin and Esa Rahtu. BMVC 2021.

April 6: Generative Adversarial Networks II

Semantic Segmentation with Generative Models: Semi-Supervised Learning and Strong Out-of-Domain Generalization

Daiqing Li, Junlin Yang, Karsten Kreis, Antonio Torralba, Sanja Fidler. CVPR 2021.

April 13: No Classes - Spring Break

April 20: Score-Based and Denoising Diusion Models

Diffusion Models Beat GANs on Image Synthesis

Prafulla Dhariwal, Alexander Quinn Nichol. NeurIPS 2021.

April 27: Project Discussions

May 2: No Classes - Ramadan Holiday

May 11: Project Progress Presentations

May 18: Self-Supervised Learning

Generative Models as a Data Source for Multiview Representation Learning

Ali Jahanian, Xavier Puig, Yonglong Tian, Phillip Isola. arXiv Preprint arXiv:2106.05258, 2021.

May 25: Multimodal Pre-training

Multimodal Few-Shot Learning with Frozen Language Models

Maria Tsimpoukelli, Jacob Menick, Serkan Cabi, S. M. Ali Eslami, Oriol Vinyals, Felix Hill. NeurIPS 2021.