

Seminar: Vision Systems MA-INF 4208

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1 Paper List

1. Neural Rendering and Applications

- a) Sajjadi, Mehdi SM, et al. *Object scene representation transformer*. NeurIPS 2022. **Link**
- b) Driess, Danny, et al. *Learning Multi-Object Dynamics with Compositional Neural Radiance Fields*. CoRL 2023. **Link**
- c) Siddiqui, Yawar et al. *Panoptic Lifting for 3D Scene Understanding with Neural Fields*. CVPR 2023. **Link**

2. Advances in Self-Supervised Learning

- a) Bardes, Adrien, et al. *VICReg: Variance Invariance Covariance Regularization for Self-Supervised Learning*. ICLR. 2022. **Link**
- b) Ziegler, Adrian et al. *Self-Supervised Learning of Object Parts for Semantic Segmentation*. CVPR 2022. **Link**
- c) Assran, Mahmoud et al. *Self-Supervised Learning from Images with a Joint-Embedding Predictive Architecture*. ArXiv PrePrint 2023. **Link**

3. Transformer-based Model Architectures

- a) Hatamizadeh, Ali, et al. *FasterViT: Fast Vision Transformers with Hierarchical Attention*. ArXiv PrePrint 2023. **Link**
- b) Beyer, Lucas, et al. *FlexiViT: One Model for All Patch Sizes*. CVPR 2023. **Link**
- c) Dao, Tri, et al. *FlashAttention: Fast and Memory-Efficient Exact Attention with IO-Awareness*. NeurIPS 2022. **Link**

4. Video Decomposition and Tracking

- a) Ye, Vickie, et al. *Deformable Sprites for Unsupervised Video Decomposition*. CVPR 2022. **Link**
- b) Wang, Qianqian, et al. *Tracking Everything Everywhere All at Once*. ArXiv Preprint 2023. **Link**
- c) Bao, Zhipeng, et al. *Object Discovery from Motion-Guided Tokens*. CVPR 2023. **Link**