

Seminar: Vision Systems MA-INF 4208

Prof. Dr. Sven Behnke, Angel Villar-Corrales

1 Paper List

1. Self-Supervised Learning Methods

- a) Zbontar, Jure, et al. *Barlow Twins: Self-Supervised Learning via Redundancy Reduction*. 2021. [link](#)
- b) Chen, Xinlei, and Kaiming He. *Exploring Simple Siamese Representation Learning*. 2021. [link](#)
- c) Caron, Mathilde, et al. *Emerging Properties in Self-Supervised Vision Transformers*. 2021. [link](#)
- d) Caron, Mathilde, et al. *Unsupervised Learning of Visual Features by Contrasting Cluster Assignments*. 2020. [link](#)

2. Advances in Neural Network Architectures

- a) Liu, Ze, et al. *Swin Transformer: Hierarchical Vision Transformer using Shifted Windows*. 2021. [link](#)
- b) Liu, Zhuang, et al. *A ConvNet for the 2020s*. 2022. [link](#)
- c) Touvron, Hugo, et al. *Going Deeper with Image Transformers*. 2021. [link](#)
- d) Kolesnikov, Alexander, et al. *Big Transfer (BiT): General Visual Representation Learning*. 2020. [link](#)

3. Object-Centric Learning

- a) Paschalidou, Despoina, et al. *ATISS: Autoregressive Transformers for Indoor Scene Synthesis*. 2021. [link](#)
- b) Kipf, Thomas, et al. *Conditional Object-Centric Learning from Video*. 2021. [link](#)
- c) Tangemann, Matthias, et al. *Unsupervised Object Learning via Common Fate*. 2021. [link](#)
- d) Lin, Zhixuan, et al. *Space: Unsupervised Object-Oriented Scene Representation via Spatial Attention and Decomposition*. 2020. [link](#)