

Academic publications

Decentralized inference and Differential Privacy

- 2025 **NoEsis: A Modular LLM with Differentially Private Knowledge Transfer**
R. ROMIJNDERS, S. LASKARIDIS, A. SHAHIN-SHAMSABADI, H. HADDADI · ICLR 2025 workshop
Internship project at the privacy-oriented browser, Brave.
- 2024 **DNA: Differentially private Neural Augmentation for contact tracing**
R. ROMIJNDERS, C. LOUIZOS, Y.M. ASANO, M. WELLING · ICLR 2024 Private ML workshop
Code available at github.com/RobRomijnders/dna; Awarded spotlight talk at the workshop.
- 2024 **Protect Your Score: Contact Tracing with Differential Privacy Guarantees**
R. ROMIJNDERS, C. LOUIZOS, Y.M. ASANO, M. WELLING · AAAI 2024
Code available; Awarded 15-minute oral talk in the main track, for top 10% of papers.
- 2023 **No time to waste: practical statistical contact tracing with few low-bit messages**
R. ROMIJNDERS, Y.M. ASANO, C. LOUIZOS, M. WELLING · AISTATS 2023
Code available at github.com/QUVA-Lab/nttw

Experience with large-scale models and training on video data

- 2021 **SI-Score: An image dataset for fine-grained analysis of robustness to object location, rotation and size**
J. YUNG, R. ROMIJNDERS, A. KOLESNIKOV, L. BEYER, J. DJOLONGA, N. HOULSBY, S. GELLY, M. LUCIC, X. ZHAI · RobustML workshop ICLR 2021
- 2022 **Beyond transfer learning: Co-finetuning for action localisation**
A. ARNAB, X. XIONG, A. GRITSENKO, R. ROMIJNDERS, J. DJOLONGA, M. DEGHANI, C. SUN, M. LUCIC, C. SCHMID · arXiv preprint 2022
- 2021 **Representation learning from videos in-the-wild: An object-centric approach**
R. ROMIJNDERS, A. MAHENDRAN, M. TSCHANNEN, J. DJOLONGA, M. RITTER, N. HOULSBY, M. LUCIC · IEEE WACV 2021

Robustness, calibration, and out of distribution generalization

- 2023 **The effect of covariate shift and network training on Out-of-Distribution Detection**
S. MARIANI, S. KLOMP, R. ROMIJNDERS, P. DE WITH · VISAPP 2023
- 2021 **Impact of aliasing on generalization in deep convolutional networks**
C. VASCONCELOS, H. LAROCHELLE, V. DUMOULIN, R. ROMIJNDERS, N. LE ROUX, R. GOROSHIN · ICCV 2021
- 2021 **Revisiting the Calibration of Modern Neural Networks**
M. MINDERER, J. DJOLONGA, R. ROMIJNDERS, F. HUBIS, X. ZHAI, N. HOULSBY, D. TRAN, M. LUCIC · NeurIPS 2021
- 2021 **On Robustness and Transferability of Convolutional Neural Networks**
J. DJOLONGA, J. YUNG, M. TSCHANNEN, R. ROMIJNDERS, L. BEYER, A. KOLESNIKOV, J. PUIGSERVER, M. MINDERER, A. D'AMOUR, D. MOLDOVAN, S. GELLY, N. HOULSBY, X. ZHAI, M. LUCIC · CVPR 2021
- 2019 **Data Selection for training Semantic Segmentation CNNs with cross-dataset weak supervision**
P. MELETIS, R. ROMIJNDERS, G. DUBBELMAN · IEEE ITSC 2019
- 2019 **Domain Agnostic Normalization for Unsupervised Adversarial Domain Adaptation**
R. ROMIJNDERS, P. MELETIS, G. DUBBELMAN · IEEE WACV 2019
Code available at github.com/RobRomijnders/dan

Deep learning for sports analytics

- 2016 **Applying Deep Learning to Basketball Trajectories**
R. SHAH, R. ROMIJNDERS · Sports Analytics Workshop, KDD 2016