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## Deep learning for tomographic reconstruction with limited data

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# LIST OF PUBLICATIONS

“Talking... , if I were as good at everything as at talking...”

“Praten... , als ik alles zo zou kunnen als praten...”

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Johan Cruijff,  
Tiq, 1 March 1967

Publications that are part of this thesis:

1. A. A. Hendriksen, D. M. Pelt, W. J. Palenstijn, S. B. Coban, and K. J. Batenburg. “On-The-Fly Machine Learning for Improving Image Resolution in Tomography”. *Applied Sciences* 9.12 (2019).
2. A. A. Hendriksen, D. M. Pelt, and K. J. Batenburg. “Noise2inverse: Self-Supervised Deep Convolutional Denoising for Tomography”. *IEEE Transactions on Computational Imaging* (2020), pp. 1–1.
3. A. A. Hendriksen, M. Bühner, L. Leone, M. Merlini, N. Viganò, D. M. Pelt, F. Marone, M. di Michiel, and K. J. Batenburg. “Deep Denoising for Multi-Dimensional Synchrotron X-Ray Tomography Without High-Quality Reference Data”. *Scientific Reports* 11.1 (2021).
4. A. A. Hendriksen, D. Schut, W. J. Palenstijn, N. Viganò, D. M. Kim Jisoo Pelt, T. van Leeuwen, and K. J. Batenburg. “TomoSipo: Fast, Flexible, and Convenient 3D Tomography for Complex Scanning Geometries in Python”. *Optics Express* (2021).

Publications that are not part of this thesis:

1. A. Hendriksen, R. de Heide, and P. Grünwald. “Optional Stopping With Bayes Factors: a Categorization and Extension of Folklore Results, With an Application To Invariant Situations”. *Bayesian Analysis* (2020).
2. A. Kostenko, W. Palenstijn, S. Coban, A. Hendriksen, R. van Liere, and K. Batenburg. “Prototyping X-Ray Tomographic Reconstruction Pipelines With Flexbox”. *SoftwareX* 11 (2020), p. 100364.
3. M. J. Lagerwerf, A. A. Hendriksen, J.-W. Buurlage, and K. J. Batenburg. “Noise2Filter: Fast, Self-Supervised Learning and Real-Time Reconstruction for 3D Computed Tomography”. *Machine Learning: Science and Technology* 2.1 (2020), p. 015012.
4. J. Minnema, M. Van Eijnatten, J. Wolff, A. A. Hendriksen, K. J. Batenburg, and T. Forouzanfar. “CT Image Segmentation for Additive Manufactured Skull Implants Using Deep Learning”. en. *Transactions on Additive Manufacturing Meets Medicine* (2019), Vol 1 (2019): Trans. AMMM.

5. R. Schoonhoven, A. A. Hendriksen, D. M. Pelt, and K. J. Batenburg. “Lean: Graph-Based Pruning for Convolutional Neural Networks By Extracting Longest Chains”. *CoRR* (2020). arXiv: 2011.06923 [cs.LG].
6. D. M. Pelt, A. A. Hendriksen, and K. J. Batenburg. “Foam-Like Phantoms for Comparing Tomography Algorithms”. *Journal of Synchrotron Radiation* 29.1 (Jan. 2022).
7. M. Bührer, H. Xu, A. A. Hendriksen, F. N. Büchi, J. Eller, M. Stampanoni, and F. Marone. “Deep learning based classification of dynamic processes in time-resolved X-ray tomographic microscopy”. *Scientific Reports* 11.1 (Dec. 2021).