

Publications of Kim Steenstrup Pedersen

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Ph.D. thesis:

- **Kim S. Pedersen.** Statistics of Natural Image Geometry. Ph.D. Thesis, Department of Computer Science, University of Copenhagen, Denmark, January 2003. Published as DIKU tech. report no. 2003/04.

Peer reviewed scientific journal papers: (17)

- Ole-Christian Galbo Engstrøm, Erik Schou Dreier, Birthe Møller Jespersen, and **Kim Steenstrup Pedersen.** IKPLS: Improved Kernel Partial Least Squares and Fast Cross-Validation Algorithms for Python with CPU and GPU Implementations Using NumPy and JAX. *Journal of Open Source Software* 9 (99), 6533, 2024. DOI: 10.21105/joss.06533
- Xiao Hu, F. Lauze, **K. Steenstrup Pedersen.** Refractive Pose Refinement: Generalising the Geometric Relation between Camera and Refractive Interface. *International Journal of Computer Vision*, 131: 1448–1476, 2023. JIF: 11,478. DataDOI: 10.17894/ucph.5d1b9bea-b105-4d43-aefb-c53df7806c2a
- E. Schou Dreier, K. M. Sørensen, T. Lund-Hansen, B. Møller Jespersen, **K. Steenstrup Pedersen.** Hyperspectral imaging for classification of bulk grain samples with deep convolutional neural networks. *Journal of Near Infrared Spectroscopy*, 30(3): 107–121, April 2022. DOI: 10.1177/09670335221078356. DataDOI: 10.17894/ucph.f8c7feeb-3b27-4bd2-ba6d-6d44a4ab4330, JIF: 1,863.
- J. Rasmussen, J. Nielsen, J. C. Streibig, J. E. Jensen, **K. S. Pedersen**, S. I. Olsen. Pre-harvest weed mapping of *Cirsium arvense* in wheat and barley with off-the-shelf UAVs. *Precision Agriculture*, pp. 1 – 17, 2019. BFI: 1, JIF: 4,454.
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- Henrik Aanæs, Anders L. Dahl and **Kim S. Pedersen.** Interesting Interest Points: A Comparative Study of Interest Point Performance on a Unique Data Set. *International Journal of Computer Vision*, Vol. 97(1): 18–35, 2012. BIF: 2, JIF: 3,62.
- Søren Hauberg, Stefan Sommer and **Kim S. Pedersen.** Natural metrics and least-committed priors for articulated tracking. *Image and Vision Computing*, 30(6-7):453-461, June 2012. BIF: 2, JIF: 1,96.

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- Ole-Christian Galbo Engstrøm, Erik Schou Dreier, Birthe Møller Jespersen, and **Kim Steenstrup Pedersen**. Improving Deep Learning on Hyperspectral Images of Grain by Incorporating Domain Knowledge from Chemometrics. 8th Workshop on Computer Vision in Plant Phenotyping and Agriculture (CVPPA), Proceedings of the IEEE/CVF International Conference on Computer Vision (ICCV). IEEE, s. 485–494, 2023.
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- Ole-Christian Galbo Engstrøm, Erik Schou Dreier, Birthe Møller Jespersen, **Kim Steenstrup Pedersen**. Analyzing Near-Infrared Hyperspectral Imaging for Protein Content Regression and Grain Variety Classification Using Bulk References and Varying Grain-to-Background Ratios. arXiv:2311.04042, 2023. <https://arxiv.org/abs/2311.04042>. DOI: 10.48550/arXiv.2311.04042
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