

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.

Scientific journal papers: (16)

- 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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- Søren Hauberg and **Kim S. Pedersen**. Predicting Articulated Human Motion from Spatial Processes. *International Journal of Computer Vision*. Vol. 94 (3): 317–334, 2011. BIF: 2, JIF: 3,741.
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- Ole-Christian Galbo Engstrøm, Erik Schou Dreier, and **Kim Steenstrup Pedersen**. Predicting Protein Content in Grain Using Hyperspectral Deep Learning. 7th Workshop on Computer Vision in Plant Phenotyping and Agriculture (CVPPA), Proceedings of the IEEE/CVF International Conference on Computer Vision (ICCV). IEEE, p. 1372-1380, 2021.
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- David Gustavsson, **Kim S. Pedersen**, and Mads Nielsen. A SVD Based Image Complexity Measure. International Conference on Computer Vision Theory and Applications (VISAPP), 2009.
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- Smith Lygum, Anne Kirstine; Skjødt Nielsen, Jacob; Bang Bådum, Nicklas; La Cour-Harbo, Anders; Paulin Hansen, John; **Pedersen, Kim Steenstrup**; Larsen, Lars Michael ; Kessing, Peter Vedel; Madsen Almdal, Thomas; Ploug, Thomas; Grønbæk, David. *Civile droner i Danmark : potentialer, udfordringer og anbefalinger*. Teknologirådet, 2014. 103 p.
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- J. Rasmussen, J. Nielsen, S. I. Olsen, **K. S. Pedersen**, J. E. Jensen, R. Horfarer. From image acquisition with unmanned aerial vehicles (UAV) to patch spraying in farmer's fields. *European Weed Research Society Symposium*, 2018.
- Egilsson, Jon; **Pedersen, Kim Steenstrup**; Olsen, Søren Ingvor; Nielsen, Jon ; Ntakos, George; Rasmussen, Jesper. Pre-harvest assessment of perennial weeds in cereals based on images from unmanned aerial systems (UAS). *17th European Weed Research Society Symposium – Weed Managing in Changing Environments*. Montpellier, France, June 2015.
- Søren Hauberg and **Kim Steenstrup Pedersen**. A Physically Natural Metric for Human Motion and the Associated Brownian Motion Model. Abstract at 1st IEEE Workshop on Kernels and Distances for Computer Vision (ICCV workshop), 2011.
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- Bjarne Kjær Ersbøll and **Kim S. Pedersen**. Preface. (Eds.). Proceedings of the 15th Scandinavian Conference on Image Analysis SCIA 2007. Springer LNCS 4522, 2007.
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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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