

# 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: (15)

- E. Schou Dreier, K. M. Sørensen, T. Lund-Hansen, B. Møller Jespersen, **K. Steenstrup Pedersen**. Hyper-spectral imaging for classification of bulk grain samples with deep convolutional neural networks. *Journal of Near Infrared Spectroscopy*. 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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- Anne Cuzol, **Kim S. Pedersen** and Mads Nielsen. Field of Particle Filters for Image Inpainting. *Journal of Mathematical Imaging and Vision*, Vol. 31(2-3): 147–156, 2008. BFI: 2, JIF: 1,331.
- Bo Markussen, **Kim S. Pedersen** and Marco Loog. Second Order Structure of Scale-Space Measurements. *Journal of Mathematical Imaging and Vision*, Vol. 31(2-3): 207–220, 2008. BFI: 2, JIF: 1,331.

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- Xiao Hu, François Lauze, **Kim Steenstrup Pedersen**, and Jean Mélou. Absolute and Relative Pose Estimation in Refractive Multi View. In *Proceedings of 1st Workshop on Traditional Computer Vision in the Age of Deep Learning (TradiCV)*. Accepted for publication, 2021.
- Georgios Karagiannis, Søren Ingvor Olsen, **Kim Steenstrup Pedersen**. Deep Learning for Detection of Railway Signs and Signals. In *Advances in Computer Vision - Proceedings of the 2019 Computer Vision Conference, CVC 2019, Las Vegas, Nevada, USA, Vol. 943*, pp. 1–15, 2020.
- Wouter M. Kouw, Silas N. Ørting, Jens Petersen **Kim S. Pedersen**, and Marleen de Bruijne. A Cross-Center Smoothness Prior for Variational Bayesian Brain Tissue Segmentation. In *Proceedings of International Conference on Information Processing in Medical Imaging — IPMI 2019: Information Processing in Medical Imaging*. Springer, LNCS 11492, pp. 360–371, 2019.
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- Sune Høgild Keller, **Kim S. Pedersen**, and Francois Lauze. Detecting Interlaced or Progressive Source of Video. In *IEEE International Workshop on Multimedia Signal Processing (MMSP05)*, p. 181 - 184, 2005.
- Bo Markussen, **Kim S. Pedersen**, Marco Loog: A Scale Invariant Covariance Structure on Jet Space. In *Proceedings of International Workshop on Deep Structure, Singularities and Computer Vision*, p. 12 - 23, LNCS 3753, Springer-Verlag, June, 2005.
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- **Kim Steenstrup Pedersen**, Rasmus Reinhold Paulsen. Special section on 19th Scandinavian conference on image analysis (SCIA 2015). *Pattern Recognition Letters*, Vol. 80, pages 238, September 2016.
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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 Ingvar; Nielsen, Jon ; Ntakos, George; Rasmussen, Jesper. Pre-harvest assessment of perennial weeds in cereals based on images from unmanned aerial systems (UAS). *17'th European Weed Research Society Symposium – Weed Managing in Changing Environments.* Montpellier, France, June 2015.
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## Technical Reports: (6)

- J. Rasmussen, J. Nielsen, J. C. Streibig, S. I. Olsen, **K. S. Pedersen**, and J. E. Jensen: Droner til monitoring af flerårigt ukrudt i korn. Miljøstyrelsen, 2016.
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