Curriculum Vitae

Personal Data

Full name:	**Kim Steenstrup Pedersen**
Born:	May 15th 1973, Roskilde, Denmark
Civil status:	Married and father of 3 children
Nationality:	Danish
Home address	Volosvej 4, 2300 København S
Current employment:	Professor, Dept. of Computer Science (DIKU) & Natural History Museum of Denmark (NHMD), University of Copenhagen
Home page:	`https://kimstp.github.io/`

Educational Background

03/2003	Ph.D. from the Department of Computer Science (DIKU), University of Copenhagen, Denmark.
02-07/2001	Research visit with Prof. David Mumford at Div. of Applied Math., Brown University, USA.
09/1999	M.Sc. in Computer Science, the Department of Computer Science, University of Copenhagen.
1997	B.Sc. in Computer Science, the Department of Computer Science, University of Copenhagen.

Employment

08/2021 – present	Professor, Department of Computer Science (DIKU) & Natural History Museum of Denmark (NHMD), University of Copenhagen, Denmark
08/2021 – present	Curator of the digital collections, Natural History Museum of Denmark, University of Copenhagen, Denmark
03/2012 – present	Co-founder, co-owner and CTO of DigiCorpus ApS, http://www.digicorpus.com
03/2012 – present	Co-founder, co-owner and CEO of Schroll Pedersen Holding ApS
01/2007 – 07/2021	Associate Professor, Department of Computer Science, University of Copenhagen, Denmark
04/2003 – 12/2006	Assistant Professor, Department of Innovation, IT University of Copenhagen, Denmark
01/2003 – 03/2003	Assistant Research Professor under the SNF grant "Computing Natural Shape" at the Department of Computer Science, University of Copenhagen, Denmark
01/2000 – 12/2002	Ph.D. student at Department of Computer Science, University of Copenhagen, Denmark
02/1999 – 09/1999	Part time research programmer within medical image analysis at Pronosco A/S, Denmark
01/1997 – 01/1999	Part time software developer and project manager at ELK ApS, Denmark

Affiliations and Membership of Scientific Societies

01/2023 – present	Science & Society research section, Natural History Museum of Denmark (NHMD), University of Copenhagen, Denmark
2022 – present	Affiliated member, Pioneer Center for Artificial Intelligence, Denmark
08/2021 – present	GBIF Head of Delegation for Denmark
2018 – present	Section for Image Analysis, Computational Modelling and Geometry (IMAGE), Department of Computer Science (DIKU), University of Copenhagen
01/2007 – 2018	Image Section, Department of Computer Science (DIKU), University of Copenhagen

Periods of leave

11/2015 – 01/2016	3 month paternity leave
11/2008 – 01/2009	3 month paternity leave
08/2004 – 10/2004	3 month paternity leave
10/1999 – 12/1999	3 month military service, Beredskabscenter Bornholm, Allinge

Managerial & administrative experience

08/2021 – present	Head of Section for Digital Collections & Archive, Natural History Museum of Denmark, University of Copenhagen
2018 – 08/2021	Head of Section, Section for Image Analysis, Computational Modelling and Geometry (IMAGE), Department of Computer Science, University of Copenhagen
2016 – 2018	Head of Section, Image Section, Department of Computer Science, University of Copenhagen
2012 – present	CTO of DigiCorpus ApS, http://www.digicorpus.com
2012 – present	CEO of Schroll Pedersen Holding ApS
2011	Leadership Development for Heads of Research Groups, University of Copenhagen, Denmark
2009 – 2012	Deputy Head of Department for Teaching, Department of Computer Science, University of Copenhagen
2008 – 2009	Member of the teaching committee at Department of Computer Science, University of Copenhagen
2003 – 2006	Elected VIP representative in the study programme committee (fagudvalg) for the Media Technology and Games (MTG) study programme at IT University of Copenhagen (ITU), Denmark
2003 – 2006	Member of the MTG interim committee for establishing the study programme at IT University of Copenhagen (ITU), Denmark

Research project funding

- Rapid and Objective Grain Quality Monitoring Using Deep Learning and Hyperspectral Imaging (**PI**), Industrial PhD with FOSS Analytical A/S funded by Innovation Fund Denmark, **DKK 2.000.000**, 06/2022 – 06/2025
- ClimbAlong (**PI**), InnoBooster project with NorthTech ApS funded by Innovation Fund Denmark, **DKK 319.005**, 06/2022 – 06/2023
- DaSSCo: Danish System of Scientific Collections (**Co-PI**), a national research infrastructure funded by Uddannelses- og Forskningsstyrelsen, **DKK 29.550.000**, 09/2021 - 08/2026
- Expanding the Tree of Life through a digital view of museum collections — PHYLORAMA (**PI**), funded by UCPH Data+ (50%) and several external sources, **DKK 4.894.916**, 10/2020 – present
- Deep Learning and Automation of Imaging-Based Quality of Seeds and Grains (**Co-PI**, DIREC Bridge project with DTU Compute, Foss Analytical A/S for 1 Ph.D. scholarship, **DKK 2.720.000**, expected 02/2021 - 02/2023)
- ClimbAlong (**PI**), industrial collaboration with NorthTech ApS funded by AI Denmark, **DKK 123.000**, 2021)
- External consultancy FaunaPhotonics A/S (**PI**, funded by the company, **DKK 158.750**, 2019 – 2021)
- 3 yr. Postdoc in Big Data and Machine Learning in Food Science and Food Processing Technology (**PI**), funded by DIKU, **DKK 600.000**, Dept. of FOOD, **DKK 600.000**, and Foss Analytical A/S, **DKK 600.000**, 2019 – 02/2022
- Railroad assets mapping (**Co-PI**), Innovation Fond DK Industrial phd with COWI A/S, **DKK 2.000.000**, 01/2017 - 04/2020
- InnoBooster consultancy for Bilagscan (**Co-PI**, Innovation Fond DK, **DKK 100.000**, 2017)
- Surveying the sky using machine learning — SkyML (**Co-PI**, DFF FNU (12-125149) project 2 grant, **DKK 4.963.991**, 2013 - 2016)
- InnoBooster consultancy for Snaplytics (**Co-PI**, Innovation Fond DK, **DKK 105.000**, 2016)
- Droner til monitorering af flerårigt ukrudt i korn (**Co-PI**, Miljøstyrelsen, Miljøministeriet, **DKK 403.401**, 2013 - 2016)
- Human Motion Imitation (HUMIM) (**PI**, internally funded project 2 Phd scholarship (SCIENCE, UCPH), **DKK 3.000.000**, 2009 – 2012)
- VISIONTRAIN (**Co-PI**, EU funded Marie Curie Training Network with 11 international partners, **DKK 2.530.127**, 2005 – 2009)
- Natural Image Sequence Analysis (**Co-PI**, DFF FNU framework grant no. 272-05-0256, **DKK 300.000**, 2006 – 2008)
- French Embassy in Denmark grant for collaboration with P. Pérez, E. Mémin, and Francois Lauze (**Co-PI**, **DKK 18.000**, 2008 – 2009)

Selected international and national collaborations (present and past):

Alexey Solodovnikov, the Natural History Museum of Denmark, University of Copenhagen.
Anders Drud Jordan, the Natural History Museum of Denmark, University of Copenhagen.
David R. Nash, Department of Biology, University of Copenhagen.
Francois Lauze, Department of Computer Science, University of Copenhagen.
Jean-Denis Durou, IRIT, University of Toulouse, France
Jean Mélou, IRIT, University of Toulouse, France
Xiao Hu, DTU Space, The Technical University of Denmark, Denmark
Søren Balling Engelsen, Dept. of Food, University of Copenhagen
Birthe Møller Jespersen, Dept. of Food, University of Copenhagen
Klavs Martin Sørensen, Dept. of Food, University of Copenhagen & Foss Analytical A/S.
Erik Shou Dreier, Foss Analytical A/S.
Lars Nørgaard, Foss Analytical A/S.
Lars Kai Hansen, DTU Compute, DTU, Denmark
Wouter M. Kouw, TU Eindhoven, Holland.
Jesper Rasmussen, Dept. of Plant and Environmental Sciences, University of Copenhagen.
Fabian Gieseke, Westfälische Wilhelms-Universität Münster, Germany.
Anders Dahl, Technical University of Denmark.
Marco Loog, Delft University of Technology, Holland.
Anne Cuzol, Vannes, France.
Remco Duits, Technical University of Eindhoven, Holland.
Ann B. Lee, Carnegie Mellon University, USA.
David Mumford, Brown University, USA.

Ph.D. / Post Doc. Supervision and student project production

Currently supervising 3 PhD students and 1 Post Doc. researcher.
Previously supervised 6 Ph.D. student and 5 Post Doc. researchers.
Chairman / Member of 15 PhD assessment committees (both national and international).
Organized and taught on 8 different Ph.D. level courses and seminars.
Have supervised and completed 76 Master theses (30 - 60 ECTS) and 112 BSc theses and other student projects (7.5 - 20 ECTS).

Honourable Research Services, Awards, Conference and workshop organization

- Program committee chair and editor of Scandinavian Conference on Image Analysis (SCIA) in Copenhagen, Denmark, 2015.
- Best paper award at the 3DPVT 2010 conference for the paper "On Recall Rate of Interest Point Detectors". Henrik Aanæs, Anders Dahl and Kim Steenstrup Pedersen.
- Organized workshops in the HUMIM project, 2009–2012.
- Organising program committee member and editor of Scandinavian Conference on Image Analysis (SCIA) in Aalborg, Denmark, 2007.
- Organized workshops in the NISA project, 2006 - 2008.
- Program committee member of the 4th International Scale-Space Conference, Scotland, 2003.
- Reviewer at international conferences and journals: International Journal of Computer Vision, IEEE Transaction on Pattern Analysis and Machine Intelligence, IEEE Transaction on Image Processing, Journal of Mathematical Imaging and Vision, Electronic Letters on Computer Vision and Image Analysis, ICCV, CVPR, ECCV, SSVM, MICCAI, SCIA.

Key research topics

My primary research interests include topics from computer vision, image analysis and machine learning, especially object recognition and detection, tracking and motion models, stochastic image models, and natural image statistics. I have made contributions to the theoretical foundations of low-level vision, including applications of machine learning to low-level vision, scale space theory, articulated tracking of human motion, and image features and applications thereof. I am currently working with applications of computer vision within natural history collections, biodiversity monitoring, agriculture and precision farming, astronomy, and industrial applications.

Publications

Total number of publications in; international peer reviewed journals (16), peer reviewed conferences and workshops (38), other publications including special issues, proceeding books, and Ph.D. thesis (22).

Google Scholar profile: `https://scholar.google.dk/citations?user=RzH2vKQAAAAJ`

ORCID `http://orcid.org/0000-0003-3713-0960`