



Computer Vision Researcher

NATIONALITY: Dutch | PRONOUNS: she/her/hers.

ROLES: Researcher, adviser, lecturer, invited speaker, computer scientist.

EMAIL: Silvia[dot]Laura[dot]Pintea[at]gmail[dot]com

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My work is in the field of AI, specifically Computer Vision and Deep Learning, where I have extensive experience with video and image analysis, specifically scale-invariance, video motion representations and regression problems.

My current focus is on effective video analysis and robust motion representations.

WORK EXPERIENCE

Senior PostDoc (Guest researcher) JOB DESCRIPTION PERIOD	Division of Image Processing (LKEB), LUMC, Leiden, NL Vision Lab, Delft University of Technology (TUDelft), Delft, NL Efficient video and motion representations towards surgery video analysis. MAY 2022 — PRESENT
Researcher JOB DESCRIPTION PERIOD	Vision Lab, Delft University of Technology (TUDelft), Delft, NL Focus on Deep Learning scale-invariance and efficiency. JULY 2020 — FEBRUARY 2022
PostDoc JOB DESCRIPTION PERIOD	Vision Lab, Delft University of Technology (TUDelft), Delft, NL Collaboration with LUMC and the Geophysics department at TUDelft. Working on image and video analysis: geometric priors, scale-invariance, video representations, etc. JULY 2016 — JULY 2020
R&D Engineer JOB DESCRIPTION PERIOD	Layar/Blippar, Amsterdam, NL Efficient large-scale image matching and retrieval. JANUARY — JUNE 2016

EDUCATION

PhD FOCUS THESIS TITLE PERIOD	Computer Vision , University of Amsterdam (UvA), Amsterdam, NL Motion prediction, object localization, video representation learning Continuous Learning in Computer Vision 2011 – 2015
MSc FOCUS PERIOD AVG. GRADE	Artificial Intelligence , University of Amsterdam, (UvA) Amsterdam, NL Machine Learning, Computer Vision, Neural Networks, Game Theory. 2009 – 2011 8.31 (out of 10)
BSc FOCUS PERIOD AVG. GRADE	Computer Science , University of Bucharest, Faculty of Mathematics and Computer Science, Bucharest, RO Algorithms and data structures, Object oriented programming, Formal methods. 2005 – 2008 9.40 (out of 10)

KEY PUBLICATIONS

- “**A step towards understanding why classification helps regression**” *SL Pintea*, Y. Lin, J. Dijkstra, JC van Gemert, International Conference on Computer Vision (ICCV) 2023.
- “**Resolution learning in deep convolutional networks using scale-space theory**”, *SL Pintea*, N Tomen, SF Goes, M Loog, JC van Gemert, Transactions on Image Processing (TIP), 2021.
- “**No frame left behind: Full Video Action Recognition**”, X Liu, *SL Pintea*, FK Nejadasl, O Booi, JC van Gemert. Computer Vision and Pattern Recognition (CVPR), 2021.
- “**Déjà Vu: Motion Prediction in Static Images.**”, *SL Pintea*, JC van Gemert, AWM Smeulders, European Conference on Computer Vision (ECCV), 2014.

Complete list of publications: <https://scholar.google.nl/citations?user=shTkx9EAAAAJ&hl=en>

QUALIFICATIONS AND TRAINING

BKO University teaching qualifications (TUDelft), completed in 2022.
PDP Tenure Track Personal Development Program (TUDelft), completed in 2021.

TEACHING AND GUIDING

COURSE RESPONSIBLE BSc Image Processing course (2021-2022),
LECTURER BSc Image Processing course (2017-2022),
MSc Computer Vision course at TUDelft (2018-2022)
MSC ADVISER Tobias Stahl, Yichao Zhang, Chengqiu Zhang, Xilin Li, Yue Liu, Omar Hommos, Xiaoming Wen, Jian Zheng, Ziyu Bao, Yordan Dimitrov, Nikhil Saldanha, Ziyu Bao, Jimmy Vlekke, Frans de Boer, Douwe Hoonhout
PHD ADVISER Xin Liu, Yancong Lin, Vedran Vukotic (visiting student), Abolfazi Nadi (visiting student)
PHD COPROMOTOR Yancong Lin, Xin Liu
TEACHING ASSISTANT BSc Short Course on Pattern Recognition (2017-2019)

COMMUNITY SERVICE & ADDITIONAL INFO

INVITED SPEAKER Startup Village (Amsterdam, 2022), AIRLab (Delft, 2019), NucTech meeting (Delft, 2018), Delft-Leiden Deep Learning Seminars (Leiden, 2019)
INVITED LECTURER Deep Learning MSc course TUDelft (2019)
AWARD Outstanding Reviewer: CVPR (2021, 2022), ICCV (2021), ECCV (2022), BMVC(2021, 2022)
Best paper award for the Workshop on Hands, ECCVw (2018)
INTERNATIONAL CONFERENCES ICCV (2023,2021), CVPR (2021), ECCV (2020, 2016, 2014), ICIP (2018, 2016)
LOCAL CONFERENCES/EVENTS Video Understanding Symposium (2023), NCCV (2018 - 2023), NVPBV (2017), ICT.Open (2016, 2012)
REVIEWER (SINCE 2012) CVPR, ECCV/ICCV, BMVC, WACV, ICPR, TIP, IJCV
PROGRAMMING Python, PyTorch, TensorFlow, C/C++, Caffe, Torch, PHP, Java, OpenCV, Dlib, Shogun, LibSVM, ViFeat, Yael, Matlab