

Computer Vision Researcher

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

Roles: Researcher, lecturer, mentor, invited speaker, computer scientist.

Email: Silvia[dot]Laura[dot]Pintea[at]gmail[dot]com Webpage: http://silvialaurapintea.github.io

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

Researcher

Job Description

Period

PostDoc

Job Description

Period

R&D Engineer

Job Description

Period

PhD

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

Vision Lab, Delft University of Technology (TUDelft), Delft, NL

Focus on Deep Learning scale-invariance and efficiency.

July 2020 — February 2022

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

Layar/Blippar, Amsterdam, NL (AUGMENTED REALITY COMPANY)

Focus on efficient large-scale image matching and retrieval.

January — June 2016

EDUCATION

Computer Vision, University of Amsterdam (UvA), Amsterdam, NL Focus

Motion prediction, object localization, video representation learning

Thesis Title Continuous Learning in Computer Vision

Period 2011 - 2015

MScArtificial Intelligence, University of Amsterdam, (UvA) Amsterdam, NL

Machine Learning, Computer Vision, Neural Networks, Game Theory. Focus

Period | Avg. Grade 2009 - 2011 | 8.31 (out of 10)

Computer Science, University of Bucharest, Faculty of Mathematics and Computer BSc

Science, Bucharest, RO

Algorithms and data structures, Object oriented programming, Formal methods. Focus

Period | Avg. grade 2005 - 2008 | 9.40 (out of 10)

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)

Tobias Stahl, Yichao Zhang, Chengqiu Zhang, Xilin Li, Yue Liu, Omar Hommos, Xi-MSC ADVISER

aoming Wen, Jian Zheng, Ziyu Bao, Yordan Dimitrov, Nikhil Saldanha, Ziyu Bao,

Jimmy Vlekke, Frans de Boer, Douwe Hoonhout

PhD adviser Dr. Xin Liu, Dr. Yancong Lin, Vedran Vukotic (visting student), Abolfazi Nadi (visiting

student)

PhD copromotor Dr. Yancong Lin, Dr. Xin Liu

TEACHING ASSISTANT BSc Short Course on Pattern Recognition (2017-2019)

QUALIFICATIONS AND TRAINING

BKO University teaching qualifications (TUDelft), completed in 2022.

PDP Tenure Track Personal Development Program (TUDelft), completed in 2021.

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 Booij, 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

COMMUNITY SERVICE, AWARDS & OTHER

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), NVPHBV
	(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, VlFeat, Yael, Matlab