

Computer Vision Researcher

Roles: Researcher, Engineer, Supervisor, Lecturer, Invited speaker.

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My work in Computer Vision has been focused on: motion analysis extended to medical applications in collaboration with Leiden University Medical Center, and regression problems, also combined with the use of Deep Learning. I am now looking into using Computer Vision knowledge to make Deep Networks more training-time efficient and thus more environmental friendly.

EDUCATION

PhD	Computer Vision
Institution	University van Amsterdam Amsterdam, NL
Period	2011 - 2016
Thesis Title	Continuous Learning in Computer Vision
Focus	Motion prediction, object localization, video representation learning
\mathbf{MSc}	Artificial Intelligence
Institution	University van Amsterdam Amsterdam, NL
Period /Avg. Grade	2009 - 2011 8.31 (out of 10)
Focus	Machine Learning, Computer Vision, Neural Networks, Game Theory.
\mathbf{BSc}	Computer Science
Institution	University of Bucharest, Faculty of Mathematics and Computer Science, Bucharest, RO
Period /Avg. grade	2005 - 2008 9.40 (out of 10)
Focus	Algorithms and data structures, Object oriented programming, Formal methods.

WORK EXPERIENCE

Assistant Professor	Vision Lab. Delft University of Technology, Delft, NL	

Period July 2020 — Present

$\mathbf{PostDoc}$	Vision Lab, Delft University of Technology, Delft, NL
Period	July 2016 — July 2018
IOR DESCRIPTION	Working on the "Technology in Motion" project with the Leiden University Medical Center

Working on the "Technology in Motion" project with the Leiden University Medical Center

towards diagnosing and treatment of motor diseases. Project link: https://tim.lumc.nl

R&D Engineer Layar/Blippar, Amsterdam, NL

Period January — June 2016

Job Description Adding state-of-the-art Deep Learning methods for large-scale image retrieval, feature match-

ing and binarization algorithms.

KEY PUBLICATIONS

"Divide and Count: Generic Object Counting by Image Divisions", T Stahl, SL Pintea, JC van Gemert, Transactions on Image Processing, 2018.

"Asymmetric kernels in Gaussian Process for learning target variance.", SL Pintea, JC van Gemert, AWM Smeulders, Pattern Recognition Letters, 2018

"Video Acceleration Magnification". "Conference, Y Zhang, SL Pintea, JC van Gemert, Conference on Computer Vision and Pattern Recognition, 2017 (https://acceleration-magnification.github.io)

"Déjà Vu: Motion Prediction in Static Images.", SL Pintea, JC van Gemert, AWM Smeulders, European Conference on Computer Vision, 2014, (http://github.com/SilviaLauraPintea/DejaVu)

Complete list of publications: Google Scholar

Additional Information

REVIEWER NeurIPS, ICPR, ICML, ICCV, BMVC, CVPR, ECCV, TIP, IJCV

Conference participation International participation: ECCV'14, workshop ECCV'16, ICIP'16, ICIP'18,

ECCV'20.

Local participation: ICT.Open'12, ICT.Open'16, NCCV'18. NCCV'19.

 ${\tt INVITED\ SPEAKER} \qquad {\tt NVPHBV-17,\ Nuctech\ meeting\ Delft,\ Delft-Leiden\ Deep\ Learning\ Seminars'19.}$

INVITED LECTURER Deep Learning MSc course TUDelft

(CO-)LECTURER BSc Image Processing course, MSc Computer Vision course at TUDelft
TEACHING ASSISTANT BSc Short Course on Pattern Recognition, MSc Computer Vision course.

MSC SUPERVISOR Tobias Stahl, Yichao Zhang, Chengqiu Zhang, Xilin Li, Yue Liu, Omar Hommos,

Xiaoming Wen, Jian Zheng, Ziyu Bao.

PhD (co-)supervisor Vedran Vukotic, Abolfazi Nadi, Yancong Lin, Xin Liu.

AWARD Best paper award for the Workshop on Hands, ECCV'18.

LANGUAGES & TOOLS Python, PyTorch, TensorFlow, C/C++, Caffe, Torch, PHP, Java, OpenCV,

Dlib, Shogun, LibSVM, VlFeat, Yael, Cuda-Convnet, Matlab.

 $References \qquad Dr. \ Arnold \ Smeulders \ (A[dot]W[dot]M[dot]Smeulders[at]uva[dot]nl)$

Dr. Marco Loog (M[dot]Loog[at]tudelft[dot]nl)

Dr. Jan van Gemert (J[dot]C[dot]vanGemert[at]tudelft[dot]nl)