

Computer Vision Researcher

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

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Webpage: http://silvialaurapintea.github.io

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 | $2009 - 2011 \mid 8.31 \text{ (out of } 10)$ |
| 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 | $2005 - 2008 \mid 9.40 \text{ (out of } 10)$ |
| Focus | Algorithms and data structures, Object oriented programming, Formal methods. |

WORK EXPERIENCE

| Assistant Professor | Vision Lab, Delft University of Technology, Delft, NL |
|---------------------|---|
| (Tenure Track) | Focus on Deep Learning efficiency |
| Period | July 2020 — Present |
| $\mathbf{PostDoc}$ | Vision Lab, Delft University of Technology, Delft, NL |
| Period | July 2018 — July 2020 |

| JOB DESCRIPTION | Geophysical seismic image analysis with the use of Deep Learning. $$ |
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PostDoc Vision Lab, Delft University of Technology, Delft, NL
PERIOD JULY 2016 — JULY 2018

ing and binarization algorithms.

JOB DESCRIPTION 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

| | towards diagnosing and treatment of motor diseases. Troject min. https://tem.ame.in |
|-----------------|---|
| 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- |

KEY PUBLICATIONS

"Deep hough-transform line priors.", Y Lin, SL Pintea, JC van Gemert, European Conference on Computer Vision, 2020.

"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), 2020.

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

"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)

$\textbf{Complete list of publications:} \ \text{https://scholar.google.nl/citations?user=shTkx9EAAAAJhl=en}$

Additional Information

| REVIEWER CONFERENCE PARTICIPATION | CVPR, ECCV/ICCV, BMVC, ICPR, ICML, NeurIPS, TIP, IJCV International participation: CVPR 2021, ICCV 2021, ECCV 2020, ICIP 2018, |
|-----------------------------------|---|
| CONFERENCE PARTICIPATION | ICIP 2016, workshop ECCV 2016, ECCV 2014 |
| INTURED ODEANED | Local participation: NCCV 2019, NCCV 2018, ICT.Open 2016, ICT.Open 2012 |
| Invited speaker | NVPHBV 2017, Nuctech meeting Delft, Delft-Leiden Deep Learning Seminars 2019. |
| Invited lecturer | Deep Learning MSc course TUDelft, 2019 |
| 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, Yordan Dimitrov, Nikhil Saldanha. |
| PhD supervisor | Vedran Vukotic, Abolfazi Nadi, Yancong Lin, Xin Liu. |
| Award | Outstanding Reviewer award CVPR 2021, ICCV 2021; |
| | Best paper award for the Workshop on Hands, ECCV 2018. |
| Languages & Tools | Python, PyTorch, TensorFlow, C/C++, Caffe, Torch, PHP, Java, OpenCV, |
| | Dlib, Shogun, LibSVM, VlFeat, Yael, Cuda-Convnet, Matlab. |
| References | Dr. Arnold Smeulders (A.W.M.Smeulders@uva.nl) |
| | Dr. Marco Loog (M.Loog@tudelft.nl) |
| | $\label{eq:conditional} \text{Dr. Jan van Gemert} \ (\text{J[dot]}\text{C[dot]}\text{vanGemert[at]}\text{tudelft[dot]nl})$ |
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