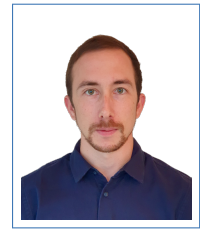


Martin Danelljan

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Google Scholar 

Citations: **28000**, H-index: **49**

Homepage 

Twitter 

LinkedIn 

GitHub 

Followers: **750**, ☆ **3800**

Experience

- Nov. 2023 – **Senior Research Engineer - Computer Vision**,  *Apple*
Now Leading a team focusing on 3D computer vision.
- Jan. 2022 – **Co-founder**, *Elevate3D*
 - Oct. 2023 State-of-the-art NeRF-based 3D reconstruction and real-time visualization.
 - Sole researcher, developer, and implementation of the core technology (Python, JAX, C++, GLSL).
 - Developed novel high-fidelity NeRF-based solution, capable of in-browser on-device real-time rendering, without any meshing, baking, or other post-processing.
 - Developed realistic material extraction, for accurate relighting and mesh export.
- Dec. 2020 – **Research Group Leader**, *Computer Vision Laboratory, ETH Zürich*
 - Oct. 2023 Managing, coordinating, and supervising research conducted by a team of several PhD students.
- Jan. 2019 – **Postdoctoral Researcher**, *Computer Vision Laboratory, ETH Zürich*
 - Nov. 2020 Under Prof. Luc Van Gool. The position includes supervision of several PhD and Master students.
- Oct. 2017 – **Co-founder**, *Singulareye*
 - Dec. 2018 Consultancy and commercialization of my research within computer vision. Projects:
 - Oct. 2017 – Dec. 2018: End-to-end design and development of a deep learning based computer vision system for automotive application. Customer: *NIRA Dynamics* (Linköping).
 - Nov. 2017 – Dec. 2018: Computer vision solution for a smartphone AR application. Deploying the visual tracking algorithms I developed during my PhD studies. Customer: *Just Football*.
- Mar. 2014 – **PhD Student in Computer Vision**, *Computer Vision Laboratory, Linköping University*
 - Dec. 2018 The position included research, studying related graduate courses (~20%) and teaching (~20%).
- Aug. 2013 – **Research Engineer and TA**, *Computer Vision Laboratory, Linköping University*
 - Mar. 2014 Continued research related to my master's thesis was combined with development of the computer vision component in the *Collaborative Unmanned Aircraft Systems* project (MATLAB and C++).
 - 2012 **Summer Intern**, *Computer Vision Laboratory, Linköping University*
Implementation and extension of a state-of-the-art video stabilization method (C++).
- 2009 – 2012 **Teaching Assistant**, *Linköping University*
Teaching assistant in a calculus course and the control theory course.

Education and Degrees

- 2014 – 2018 **Doctor of Philosophy in Computer Vision**, *Computer Vision Laboratory, Linköping University*
 - My PhD-thesis is titled *Learning Convolution Operators for Visual Tracking*.
 - I received the biennial **Best Nordic Thesis Prize** for the period 2017-2018 at SCIA 2019.
 - My main research interests were machine learning, deep learning and statistical models for computer vision applications, including visual object tracking, segmentation and registration of 3D-data.
 - Includes 90 ECTS credits of PhD-level courses within of mathematics, statistics, machine learning, computer vision, and pedagogy.

- 2008 – 2013 **Master of Science in Electrical Engineering**, *Linköping University*, average grade 5.0/5
- A five year program in Applied Physics and Electrical Engineering.
 - In the final two years: in-depth courses in signal theory, computer vision, sensor fusion, machine learning, multi-core/GPU programming and mathematics.
 - My master's thesis *Visual Tracking* was awarded **best thesis** by the Swedish computer society oral presentation at CVPR 2014.

Awards

- 2021 Honorable mention paper award at *German Conference on Pattern Recognition (GCPR/DAGM)*.
- 2020 Among top 12 reviewers for the *European Conference on Computer Vision (ECCV)*.
- 2019 **Best Nordic Thesis Prize** for the period 2017-2018, awarded at SCIA 2019.
- 2019 Best student paper award at the *British Machine Vision Conference (BMVC)*.
- 2016 Best paper award at the *International Conference on Pattern Recognition (ICPR)*.
- 2016 Top rank in the *Visual Object Tracking (VOT) Challenge 2016* at the ECCV 2016 VOT workshop.
- 2015 Top rank in the *VOT Thermal Infrared Challenge 2015* at the ICCV 2015 VOT workshop.
- 2015 Winner of the *OpenCV State-of-the-Art Vision Challenge in Tracking*.
- 2014 Winner of the *Visual Object Tracking (VOT) Challenge 2014*.
- 2014 The *Swedish Computer Society* award for **best master's thesis**.
- 2014 The *Tryggve Holm* medal for outstanding student achievements and grades.




Organization of Conferences

- 2021-2022 **Conference on Computer Vision and Pattern Recognition, CVPR 2022**, *Area Chair*
- 2021-2022 **AAAI Conference on Artificial Intelligence, 2022**, *Senior Program Committee (Meta-Reviewer)*

Organized Workshops and Tutorials

- 2023 **VOT 2023: Visual Object Tracking Challenge**, *Co-organizer*, Workshop at ICCV 2023, Paris, France
- 2023 **QCVML: Quantum Computer Vision and Machine Learning Workshop**, *Co-organizer*, Workshop at CVPR 2023, Vancouver, USA
- 2022 **VOT 2022: Visual Object Tracking Challenge**, *Co-organizer*, Workshop at ECCV 2022, Tel Aviv, Israel
- 2021 **AIM 2021: Advances in Image Manipulation**, *Co-organizer*, Workshop at ICCV 2021, Montreal, Canada (online event)
- 2021 **VOT 2021: Visual Object Tracking Challenge**, *Co-organizer*, Workshop at ICCV 2021, Montreal, Canada (online event)
- 2021 **NTIRE 2021: New Trends in Image Restoration and Enhancement**, *Co-organizer*, Workshop at CVPR 2021, USA (online event)
- 2020 **AIM 2020: Advances in Image Manipulation**, *Co-organizer*, Workshop at ECCV 2020, Glasgow, UK (online event)
- 2020 **VOT 2020: Visual Object Tracking Challenge**, *Co-organizer*, Workshop at ECCV 2020, Glasgow, UK (online event)
- 2020 **NTIRE 2020: New Trends in Image Restoration and Enhancement**, *Co-organizer*, Workshop at CVPR 2020, Seattle, USA (online event)
- 2019 **AIM 2019: Advances in Image Manipulation**, *Co-organizer*, Workshop at ICCV 2019, Seoul, South Korea
- 2019 **FIRE: From Image Restoration to Enhancement and Beyond**, *Co-organizer*, Tutorial at ICCV 2019, Seoul, South Korea
- 2018 **Discriminative Correlation Filters for Visual Tracking**, *Sole organizer*, Tutorial at GCPR 2018, Stuttgart, Germany

Open Source Projects

- ☆ 3000  **PyTracking**
- ☆ 600  **ECO**
- ☆ 190  **Continuous-ConvOp**

Supervision

Supervised PhD students

- 2020 – 2023 **Prune Truong**, ETH Zürich.
- 2021 – 2023 **Siyuan Li**, ETH Zürich.

Graduated PhD students

- 2019 – 2023 **Fredrik K. Gustafsson**, Uppsala University.
- 2021 – 2023 **Lei Ke**, ETH Zürich.
- 2020 – 2023 **Matthieu Paul**, ETH Zürich.
- 2019 – 2023 **Goutam Bhat**, ETH Zürich.
- 2019 – 2022 **Andreas Lugmayr**, ETH Zürich.
- 2020 – 2023 **Christoph Mayer**, ETH Zürich.
- 2019 – 2023 **Ardhendu Shekhar Tripathi**, ETH Zürich.
- 2018 – 2022 **Joakim Johnander**, Linköping University.

Languages

Swedish (native), English (fluent)

Selected Publications

- NeurIPS 2023 **Segment Anything in High Quality**
Lei Ke, Mingqiao Ye, **Martin Danelljan**, Yifan liu, Yu-Wing Tai, Chi-Keung Tang, Fisher Yu.
Conference on Neural Information Processing Systems (**NeurIPS**), 2023.
- NeurIPS 2023 **BiMatting: Efficient Video Matting via Binarization**
Haotong Qin, Lei Ke, Xudong Ma, **Martin Danelljan**, Yu-Wing Tai, Chi-Keung Tang, Xianglong Liu, Fisher Yu.
Conference on Neural Information Processing Systems (**NeurIPS**), 2023.
- NeurIPS 2023 **QuantSR: Accurate Low-bit Quantization for Efficient Image Super-Resolution**
Haotong Qin, Yulun Zhang, Yifu Ding, Yifan liu, Xianglong Liu, **Martin Danelljan**, Fisher Yu.
Conference on Neural Information Processing Systems (**NeurIPS**), 2023.
- ICCV 2023 **Cascade-DETR: Delving into High-Quality Universal Object Detection**
Mingqiao Ye, Lei Ke, Siyuan Li, Yu-Wing Tai, Chi-Keung Tang, **Martin Danelljan**, Fisher Yu.
IEEE International Conference on Computer Vision (**ICCV**), 2023.
- ICCV 2023 **R3D3: Dense 3D Reconstruction of Dynamic Scenes from Multiple Cameras**
Aron Schmied, Tobias Fischer, **Martin Danelljan**, Marc Pollefeys, Fisher Yu.
IEEE International Conference on Computer Vision (**ICCV**), 2023.
- ICCV 2023 **MolGrapher: Graph-based Visual Recognition of Chemical Structures**
Lucas Morin, **Martin Danelljan**, M. Isabel Agea, Ahmed Nassar, Valery Weber, Gerhard Ingmar Meijer, Peter Staar, Fisher Yu.
IEEE International Conference on Computer Vision (**ICCV**), 2023.
- CVPR 2023 **Mask-Free Video Instance Segmentation**
Lei Ke, **Martin Danelljan**, Henghui Ding, Yu-Wing Tai, Chi-Keung Tang, Fisher Yu.
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2023.
- CVPR 2023 **OVTrack: Open-Vocabulary Multiple Object Tracking**
Siyuan Li, Tobias Fischer, Lei Ke, Henghui Ding, **Martin Danelljan**, Fisher Yu.
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2023.

- CVPR 2023 **Continuous Pseudo-Label Rectified Domain Adaptive Semantic Segmentation with Implicit Neural Representations**
Rui Gong, Qin Wang, **Martin Danelljan**, Dengxin Dai, Luc Van Gool.
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2023.
- PAMI 2023 **PDC-Net+: Enhanced Probabilistic Dense Correspondence Network**
Prune Truong, **Martin Danelljan**, Radu Timofte, Luc Van Gool.
IEEE Transactions on Pattern Analysis and Machine Intelligence (**PAMI**), 2023.
- PAMI 2022 **Visual Object Tracking with Discriminative Filters and Siamese Networks: A Survey and Outlook**
Sajid Javed, **Martin Danelljan**, Fahad Shahbaz Khan, Muhammad Haris Khan, Michael Felsberg, Jiri Matas.
IEEE Transactions on Pattern Analysis and Machine Intelligence (**PAMI**), 2022.
- BMVC 2022 **AViT: A Benchmark for Visual Object Tracking in Adverse Visibility**
Mubashir Noman, Wafa Al Ghallabi, Daniya Najiha, Christoph Mayer, Akshay Dudhane, **Martin Danelljan**, Hisham Cholakkal, Salman Khan, Luc Van Gool, Fahad Shahbaz Khan.
British Machine Vision Conference (**BMVC**), 2022.
- ECCV 2022 **Dense Gaussian Processes for Few-Shot Segmentation**
Joakim Johnander, Johan Edstedt, Michael Felsberg, Fahad Shahbaz Khan, **Martin Danelljan**.
European Conference on Computer Vision (**ECCV**), 2022.
- ECCV 2022 **Robust Visual Tracking by Segmentation**
Matthieu Paul, **Martin Danelljan**, Christoph Mayer, Luc Van Gool.
European Conference on Computer Vision (**ECCV**), 2022.
- ECCV 2022 **Transform your Smartphone into a DSLR Camera: Learning the ISP in the Wild**
Ardhendu Tripathi, **Martin Danelljan**, Samarth Shukla, Radu Timofte, Luc Van Gool.
European Conference on Computer Vision (**ECCV**), 2022.
- ECCV 2022 **Tracking Every Thing in the Wild**
Siyuan Li, **Martin Danelljan**, Henghui Ding, Thomas Huang, Fisher Yu.
European Conference on Computer Vision (**ECCV**), 2022.
- ECCV 2022 **Video Mask Transfomer for High-Quality Video Instance Segmentation**
Lei Ke, Henghui Ding, **Martin Danelljan**, Yu-Wing Tai, Chi-Keung Tang, Fisher Yu.
European Conference on Computer Vision (**ECCV**), 2022.
- ECCV 2022 **TACS: Taxonomy Adaptive Cross-Domain Semantic Segmentation**
Rui Gong, **Martin Danelljan**, Dengxin Dai, Danda Pani Paudel, Ajad Chhatkuli, Fisher Yu, Luc Van Gool.
European Conference on Computer Vision (**ECCV**), 2022.
- CVPR 2022 **RePaint: Inpainting using Denoising Diffusion Probabilistic Models**
Cited by **560** Andreas Lugmayr, Martin Danelljan, Andres Romero, Fisher Yu, Radu Timofte, Luc Van Gool.
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2022.
- CVPR 2022 **Mask Transfomer for High-Quality Instance Segmentation**
Lei Ke, **Martin Danelljan**, Xia Li, Yu-Wing Tai, Chi-Keung Tang, Fisher Yu.
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2022.
- CVPR 2022 **Probabilistic Warp Consistency for Weakly-Supervised Semantic Correspondences**
Prune Truong, **Martin Danelljan**, Fisher Yu, Luc Van Gool.
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2022.
- CVPR 2022 **Adiabatic Quantum Computing for Multi Object Tracking**
Jan-Nico Zäch, Alexander Liniger, **Martin Danelljan**, Dengxin Dai, Luc Van Gool.
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2022.
- CVPR 2022 **Transforming Model Prediction for Tracking**
Christoph Mayer, **Martin Danelljan**, Goutam Bhat, Matthieu Paul, Danda Pani Paudel, Fisher Yu, Luc Van Gool.
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2022.
- CVPR 2022 **Arbitrary-Scale Image Synthesis**
Evangelos Ntavelis, Mohamad Shahbazi, Iason Kastanis, Radu Timofte, **Martin Danelljan**, Luc Van Gool.
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2022.

- ICLR 2022 **Collapse by Conditioning: Training Class-conditional GANs with Limited Data**
Mohamad Shahbazi, **Martin Danelljan**, Danda Pani Paudel, Luc Van Gool.
International Conference on Learning Representations (ICLR), 2022.
- ICRA 2022 **Learnable Online Graph Representations for 3D Multi-Object Tracking**
Jan-Nico Zäch, Dengxin Dai, Alexander Liniger, **Martin Danelljan**, Luc Van Gool.
International Conference on Robotics and Automation (ICRA), 2022.
- NeurIPS 2021 **Prototypical Cross-Attention Networks for Multiple Object Tracking and Segmentation**
Spotlight, top 3.0%
Lei Ke, Xia Li, **Martin Danelljan**, Yu-Wing Tai, Chi-Keung Tang, Fisher Yu.
Conference on Neural Information Processing Systems (NeurIPS), 2021.
- ICCV 2021 **Warp Consistency for Unsupervised Learning of Dense Correspondences**
Oral, top 3.0%
Prune Truong, **Martin Danelljan**, Fisher Yu, Luc Van Gool.
IEEE International Conference on Computer Vision (ICCV), 2021.
- ICCV 2021 **Deep Reparametrization of Multi-Frame Super-Resolution and Denoising**
Oral, top 3.0%
Goutam Bhat, **Martin Danelljan**, Fisher Yu, Luc Van Gool, Radu Timofte.
IEEE International Conference on Computer Vision (ICCV), 2021.
- ICCV 2021 **Generating Masks from Boxes by Mining Spatio-Temporal Consistencies in Videos**
Bin Zhao, Goutam Bhat, **Martin Danelljan**, Luc Van Gool, Radu Timofte.
IEEE International Conference on Computer Vision (ICCV), 2021.
- ICCV 2021 **Learning Target Candidate Association to Keep Track of What Not to Track**
Cited by 160
Christoph Mayer, **Martin Danelljan**, Danda Pani Paudel, Luc Van Gool.
IEEE International Conference on Computer Vision (ICCV), 2021.
- ICCV 2021 **Hierarchical Conditional Flow: A Unified Framework for Image Super-Resolution and Image Rescaling**
Jingyun Liang, Andreas Lugmayr, Kai Zhang, **Martin Danelljan**, Luc Van Gool, Radu Timofte.
IEEE International Conference on Computer Vision (ICCV), 2021.
- ICCV 2021 **Scaling Semantic Segmentation Beyond 1K Classes on a Single GPU**
Shipra Jain, Danda Pani Paudel, **Martin Danelljan**, Luc Van Gool.
IEEE International Conference on Computer Vision (ICCV), 2021.
- CVPR 2021 **Learning Accurate Dense Correspondences and When to Trust Them**
Oral, top 4.0%
Prune Truong, **Martin Danelljan**, Luc Van Gool, Radu Timofte.
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021.
- CVPR 2021 **DeFlow: Learning Complex Image Degradations from Unpaired Data with Conditional Flows**
Oral, top 4.0%
Valentin Wolf, Andreas Lugmayr, **Martin Danelljan**, Luc Van Gool, Radu Timofte.
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021.
- CVPR 2021 **Deep Burst Super-Resolution**
Goutam Bhat, **Martin Danelljan**, Luc Van Gool, Radu Timofte.
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021.
- CVPR 2021 **The Heterogeneity Hypothesis: Finding Layer-Wise Dissimilated Network Architecture**
Yawei Li, Wen Li, **Martin Danelljan**, Kai Zhang, Shuhang Gu, Luc Van Gool, Radu Timofte.
IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2021.
- ICRA 2021 **Few-Shot Classification By Few-Iteration Meta-Learning**
Ardhendu Tripathi, **Martin Danelljan**, Luc Van Gool, Radu Timofte.
International Conference on Robotics and Automation (ICRA), 2021.
- NeurIPS 2020 **DeepSVG: A Hierarchical Generative Network for Vector Graphics Animation**
Alexandre Carlier, **Martin Danelljan**, Alexandre Alahi, Radu Timofte.
Conference on Neural Information Processing Systems (NeurIPS), 2020.
- NeurIPS 2020 **GOCor: Bringing Globally Optimized Correspondence Volumes into Your Neural Network**
Prune Truong, **Martin Danelljan**, Luc Van Gool, Radu Timofte.
Conference on Neural Information Processing Systems (NeurIPS), 2020.
- ECCV 2020 **Learning What to Learn for Video Object Segmentation**
Cited by 130
Oral, top 2.1%
Goutam Bhat, Felix Järemo Lawin, **Martin Danelljan**, Andreas Robinson, Michael Felsberg, Luc Van Gool, Radu Timofte.
European Conference on Computer Vision (ECCV), 2020.

- ECCV 2020 **SRFlow: Learning the Super-Resolution Space with Normalizing Flow**
Cited by **280**
Spotlight
top **5.3%**
Andreas Lugmayr, **Martin Danelljan**, Luc Van Gool, Radu Timofte.
European Conference on Computer Vision (**ECCV**), 2020.
- ECCV 2020 **Energy-Based Models for Deep Probabilistic Regression**
Fredrik K Gustafsson, **Martin Danelljan**, Goutam Bhat, Thomas B Schön.
European Conference on Computer Vision (**ECCV**), 2020.
- ECCV 2020 **Know Your Surroundings: Exploiting Scene Information for Object Tracking**
Cited by **280**
Goutam Bhat, **Martin Danelljan**, Luc Van Gool, Radu Timofte.
European Conference on Computer Vision (**ECCV**), 2020.
- ECCV 2020 **Video object segmentation with episodic graph memory networks**
Cited by **250**
Spotlight
top **5.3%**
Xinkai Lu, Wenguan Wang, **Martin Danelljan**, Tianfei Zhou, Jianbing Shen, Luc Van Gool.
European Conference on Computer Vision (**ECCV**), 2020.
- BMVC 2020 **How to Train Your Energy-Based Model for Regression**
Fredrik K Gustafsson, **Martin Danelljan**, Radu Timofte, Thomas B Schön.
British Machine Vision Conference (**BMVC**), 2020.
- CVPR 2020 **GLU-Net: Global-Local Universal Network for Dense Flow and Correspondences**
Cited by **130**
Prune Truong, **Martin Danelljan**, Radu Timofte.
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2020.
- Oral**, top **5.7%**
- CVPR 2020 **Learning Fast and Robust Target Models for Video Object Segmentation**
Cited by **130**
Andreas Robinson, Felix Järemo Lawin, **Martin Danelljan**, Fahad Khan, Michael Felsberg.
Oral, top **5.7%**
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2020.
- CVPR 2020 **Probabilistic Regression for Visual Tracking**
Cited by **500**
Martin Danelljan, Luc Van Gool, Radu Timofte.
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2020.
- CVPR 2020 **Learning Human-Object Interaction Detection using Interaction Points**
Cited by **210**
Tiancai Wang, Tong Yang, **Martin Danelljan**, Fahad Khan, Xiangyu Zhang, Jian Sun.
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2020.
- CVPRW 2020 **Energy-Based Models for Deep Probabilistic Regression**
Cited by **250**
Fredrik K Gustafsson, **Martin Danelljan**, Thomas B Schön.
CVPR Workshops, 2020.
- ICCV 2019 **Learning Discriminative Model Prediction for Tracking**
Cited by **1030**
Goutam Bhat, **Martin Danelljan**, Luc Van Gool, Radu Timofte.
Oral, top **4.3%**
IEEE International Conference on Computer Vision (**ICCV**), 2019.
- ICCV 2019 **Learning the model update for siamese trackers**
Cited by **330**
Lichao Zhang, Abel Gonzalez-Garcia, Joost van de Weijer, **Martin Danelljan**, Fahad Shahbaz Khan.
IEEE International Conference on Computer Vision (**ICCV**), 2019.
- BMVC 2019 **Tracking the Known and the Unknown by Leveraging Semantic Information**
Oral, top **4.7%**
Ardhendu Shekhar Tripathi, **Martin Danelljan**, Luc Van Gool, Radu Timofte.
British Machine Vision Conference (**BMVC**), 2019. **Best student paper award.**
- CVPR 2019 **ATOM: Accurate Tracking by Overlap Maximization**
Cited by **1190**
Martin Danelljan, Goutam Bhat, Fahad Khan, Michael Felsberg.
Oral, top **5.6%**
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2019.
- CVPR 2019 **A Generative Appearance Model for End-to-end Video Object Segmentation**
Cited by **190**
Joakim Johnander, **Martin Danelljan**, Emil Brissman, Fahad Khan, Michael Felsberg.
Oral, top **5.6%**
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2019.
- ECCV 2018 **Unveiling the Power of Deep Tracking**
Cited by **510**
Goutam Bhat, Joakim Johnander, **Martin Danelljan**, Fahad Khan, Michael Felsberg.
European Conference on Computer Vision (**ECCV**), 2018.
- CVPR 2018 **Density Adaptive Point Set Registration**
Oral, top **2.1%**
Felix Järemo Lawin, **Martin Danelljan**, Fahad Khan, Per-Erik Forssén, Michael Felsberg.
IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2018.

- PRL 2018 **Deep motion and appearance cues for visual tracking**
Martin Danelljan, Goutam Bhat, Susanna Gladh, Fahad Shahbaz Khan, Michael Felsberg.
 Pattern Recognition Letters, 2018. Special issue invited paper.
- TIP 2018 **Synthetic data generation for end-to-end thermal infrared tracking**
 Lichao Zhang, Abel Gonzalez-Garcia, Joost van de Weijer, **Martin Danelljan**, Fahad Shahbaz Khan.
 IEEE Transactions on Image Processing, 2018.
- CVPR 2017 **ECO: Efficient Convolution Operators for Tracking**
 Cited by **2690** **Martin Danelljan**, Goutam Bhat, Fahad Khan, Michael Felsberg.
 IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2017.
- PAMI 2017 **Discriminative Scale Space Tracking**
 Cited by **1350** **Martin Danelljan**, Gustav Häger, Fahad Khan, Michael Felsberg.
 IEEE Transactions on Pattern Analysis and Machine Intelligence (**PAMI**), 2017.
- CAIP 2017 **Deep projective 3D semantic segmentation**
 Cited by **350** Felix Järemo Lawin, **Martin Danelljan**, Patrik Tosteberg, Goutam Bhat, Fahad Khan, Michael Felsberg.
Oral International Conference on Computer Analysis of Images and Patterns (**CAIP**), 2017.
- ECCV 2016 **Beyond Correlation Filters: Learning Continuous Convolution Operators for Visual Tracking**
 Cited by **2060** **Martin Danelljan**, Andreas Robinson, Fahad Khan, Michael Felsberg.
Oral, top 1.8% European Conference on Computer Vision (**ECCV**), 2016.
- ICPR 2016 **Deep Motion Features for Visual Tracking**
Oral Susanna Gladh, **Martin Danelljan**, Fahad Khan, Michael Felsberg.
 International Conference on Pattern Recognition (**ICPR**), 2016. **Best paper award.**
- ICPR 2016 **Aligning the Dissimilar: A Probabilistic Method for Feature-Based Point Set Registration**
Oral **Martin Danelljan**, Giulia Meneghetti, Fahad Shahbaz Khan, Michael Felsberg.
 International Conference on Pattern Recognition (**ICPR**), 2016.
- CVPR 2016 **A Probabilistic Framework for Color-Based Point Set Registration**
Martin Danelljan, Giulia Meneghetti, Fahad Khan, Michael Felsberg.
 IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2016.
- CVPR 2016 **Adaptive Decontamination of the Training Set: A Unified Formulation for Discriminative Visual Tracking**
 Cited by **480** **Martin Danelljan**, Gustav Häger, Fahad Khan, Michael Felsberg.
 IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2016.
- ICCV 2015 **Learning Spatially Regularized Correlation Filters for Visual Tracking**
 Cited by **2370** **Martin Danelljan**, Gustav Häger, Fahad Khan, Michael Felsberg.
 IEEE International Conference on Computer Vision (**ICCV**), 2015.
- ICCVW 2015 **Convolutional Features for Correlation Filter Based Visual Tracking**
 Cited by **1170** **Martin Danelljan**, Gustav Häger, Fahad Khan, Michael Felsberg.
 ICCV workshop on the Visual Object Tracking (VOT) Challenge, 2015.
- BMVC 2014 **Accurate Scale Estimation for Robust Visual Tracking**
 Cited by **2590** **Martin Danelljan**, Gustav Häger, Fahad Khan, Michael Felsberg.
 British Machine Vision Conference (**BMVC**), 2014.
- CVPR 2014 **Adaptive Color Attributes for Real-Time Visual Tracking**
 Cited by **1920** **Martin Danelljan**, Fahad Shahbaz Khan, Michael Felsberg, Joost van de Weijer.
Oral, top 5.8% IEEE Conference on Computer Vision and Pattern Recognition (**CVPR**), 2014.