



Dr Cedric Scheerlinck

Machine Learning Engineer

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EMPLOYMENT

- 2021 - current **Deep learning engineer, Skydio**
- 2020 - 2021 **Producer/Director, Finding X**
Screen Australia Skip Ahead VI
- 2016 – 2018 **Teaching Assistant, University of Melbourne & Australian National University**
- 2015 **Research Assistant, University of Melbourne**
Isotropic turbulence
- 2011 – 2016 **Science & Mathematics Tutor, Self-Employed**

EDUCATION

- 2017 – 2021 **PhD, Australian National University & Australian Centre for Robotic Vision**
“How to see with an Event Camera”
- 2018 – 2019 **Research Visit, University of Zurich & ETH**
Robotics and Perception Group: Machine learning with event cameras
- 2015 – 2016 **Masters of Mechanical Engineering, University of Melbourne**
Thesis: Computational fluid dynamics
- 2015 **Masters Project, ETH Zurich**
Flow visualization
- 2012 – 2014 **Bachelor of Science, University of Melbourne**

PROJECTS

- 2020 Event CNN collaboration (machine learning, Python)
https://github.com/TimoStoff/event_cnn_minimal
- 2019 Event Camera Wikipedia page https://en.wikipedia.org/wiki/Event_camera
- 2019 Color Event Camera Dataset <http://rpg.ifi.uzh.ch/CED.html>
- 2018 DVS Image Reconstruction (open-source C++ project)
https://github.com/cedric-scheerlinck/dvs_image_reconstruction

AWARDS

- 2018 – 2019 Swiss Government Excellence Scholarship
- 2017 – 2021 PhD Scholarship (AGRTP & Australian Centre for Robotic Vision)
- 2015 – 2016 Dean's Honours List (top 5%) Melbourne University School of Engineering
- 2015 Exchange Scholarship (MGSA, Melbourne University -> ETH Zürich)
- 2014 Dean's Honours List, Melbourne University Bachelor of Science

MISC.

- 2017 Associate Fellowship of the Higher Education Academy (AFHEA)
- 2009 Associate in Music, Australia (piano) (AMusA)

PUBLICATIONS

<https://cedricscheerlinck.com/publications>

1. Z. Wang, Y. Ng, C. Scheerlinck, R. Mahony, "An Asynchronous Kalman Filter for Hybrid Event Cameras", International Conference on Computer Vision (ICCV), October 2021.
2. C. Scheerlinck, "How to See with an Event Camera", Ph.D. Thesis, Australian National University, Canberra, Australia, 2021.
3. L. Pan, R. Hartley, C. Scheerlinck, M. Liu, X. Yu, Y. Dai, "High Frame Rate Video Reconstruction based on an Event Camera", IEEE Transactions on Pattern Analysis and Machine Intelligence (TPAMI), November 2020.
4. T. Stoffregen*, C. Scheerlinck*, D. Scaramuzza, T. Drummond, N. Barnes, L. Kleeman, R. Mahony, "Reducing the Sim-to-Real Gap for Event Cameras", European Conference on Computer Vision (ECCV), 2020.
5. C. Scheerlinck, H. Rebecq, D. Gehrig, N. Barnes, R. Mahony, D. Scaramuzza, "Fast Image Reconstruction with an Event Camera", Winter Conference on Applications of Computer Vision (WACV), 2020.
6. C. Scheerlinck*, H. Rebecq*, T. Stoffregen, N. Barnes, R. Mahony, D. Scaramuzza, "CED: Color Event Camera Dataset", Conference on Computer Vision and Pattern Recognition Workshops (CVPRW), 2019.
7. L. Pan, C. Scheerlinck, X. Yu, R. Hartley, M. Liu, Y. Dai, "Bringing a Blurry Frame Alive at High Frame-Rate with an Event Camera", Conference on Computer Vision and Pattern Recognition (CVPR), 2019.
[Oral accept. rate 6%]
8. C. Scheerlinck, N. Barnes, R. Mahony, "Asynchronous Spatial Image Convolutions for Event Cameras", IEEE Robotics and Automation Letters (RAL), 4(2), April 2019, pp. 816-822.
[Also presented at IEEE International Conference on Robotics and Automation (ICRA), 2019.]
9. C. Scheerlinck, N. Barnes, R. Mahony, "Continuous-time Intensity Estimation Using Event Cameras", Asian Conference on Computer Vision (ACCV), Perth, 2018, pp.308-324.
10. C. Scheerlinck, C. Mamon, T. Zahtila, W. Nguyen, E. Poon, V. Thondapu, C. Chin, S. Moore, P. Barlis, & A. Ooi, "Effect of Medical Imaging Modalities on the simulated blood flow through a 3D reconstructed stented coronary artery segment", 20th Australasian Fluid Mechanics Conference (AFMC), Perth, 2016.

*Equal contribution.