Cedric Scheerlinck

PhD Candidate

Email: cedric.scheerlinck1@gmail.com
Web: https://cedric-scheerlinck.github.io
Google Scholar: https://scholar.google.com.au/citations?user=UU0Ql2wAAAAJ

EDUCATION

2017 – 2020 **PhD candidate, Australian National University & Australian Centre for Robotic Vision**
12 months at the University of Zurich & ETH.

2015, 2016 **Masters of Mechanical Engineering, The University of Melbourne**
Weighted Average Mark: 87% (H1), exchange semester ETH Zurich (2015) grade: 4.95, Dean's Honours List (top 5%).

2012 – 2014 **Bachelor of Science, The University of Melbourne**
Weighted Average Mark: 84% (H1), Dean's Honours List.

2010, 2011 **Secondary Education, The University High School**
Top 1.75 percentile.

RESEARCH

09/2018 - 09/2019 **Research Visit, RPG, University of Zurich & ETH**
University of Zurich[UZH]
Supervisors: Prof. Davide Scaramuzza, Dr. Guillermo Gallego.
Image reconstruction, optical flow and deep learning with event cameras.

02/2017 – 02/2020 **PhD candidate, ANU & ACRV**
Australian National University
Supervisors: Prof. Robert Mahony, A/Prof. Nicholas Barnes, Prof. Tom Drummond.
Continuous-time robotic vision with event cameras.

03/2016 – 11/2016 **Masters Thesis, The University of Melbourne**
THE UNIVERSITY OF MELBOURNE
Supervisors: Prof. Andrew Ooi, Prof. Peter Barlis, Dr. Eric Poon.
Computational fluid dynamics on 3D reconstructed coronary arteries.

09/2015 – 12/2015 **Semester Project (Masters), ETH Zurich**
ETH zürich
Supervisors: Prof. Thomas Rösgen, Dr. Lukas Prochazka.
Flow visualization in porous media using thermal imaging.

EMPLOYMENT

2017, 2018 **Teaching Assistant, The Australian National University**
Courses: ENGN4200, ENGN4221, ENGN8170.

2016 **Teaching Assistant, The University of Melbourne**
Course: MCEN30014.

2015 **Research Assistant, The University of Melbourne**
Supervisors: Prof. Ivan Marusic, Dr. Jimmy Philip.
Building an oscillating grid to generate isotropic turbulence.

2011 – 2016 **Private Tutor**
Mathematics, Physics, Chemistry, Biology

AWARDS AND SCHOLARSHIPS

2018-2019	Swiss Government Excellence Scholarship
2018	Research to Impact (CBR Innovation Network)
2017-2020	Australian Government Research Training Program Scholarship
2017-2020	Postgraduate Research Scholarship (Australian Centre for Robotic Vision)
2015, 2016	Dean's Honours List (top 5%) (Melbourne University School of Engineering)
2015	Melbourne Global Scholars Award (University of Melbourne - ETH Zürich)
2014	Dean's Honours List, Bachelor of Science (University of Melbourne)

PUBLICATIONS

1. T. Stoffregen*, C. Scheerlinck*, D. Scaramuzza, T. Drummond, N. Barnes, L. Kleeman, R. Mahony, “How To Train Your Event Camera Neural Network”, arXiv, 2020.
2. 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.
3. 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.
4. L. Pan, R. Hartley, C. Scheerlinck, M. Liu, X. Yu, and Y. Dai, “High Frame Rate Video Reconstruction based on an Event Camera”, arXiv, 2019.
5. 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%)
6. 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. Accept. rate 44%)
7. C. Scheerlinck, N. Barnes, R. Mahony, “Continuous-time Intensity Estimation Using Event Cameras”, Asian Conference on Computer Vision (ACCV), Perth, 2018, pp.308-324. (Accept. rate 28%)
8. 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.
9. E. Poon, V. Thondapu, C. Chin, C. Scheerlinck, T. Zahtila, C. Mamon, W. Nguyen, A. Ooi, & P. Barlis, “Computational fluid dynamics comparisons of wall shear stress in patient-specific coronary artery bifurcation using coronary angiography and optical coherence tomography”, APS Meeting Abstracts, 2016.

*Equal contribution.

PROJECTS

2020	High Quality Frames Event Camera Dataset https://cedric-scheerlinck.github.io/20ecnn
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

CERTIFICATES AND AFFILIATIONS

2020	IEEE Student Member
2017	Associate Fellowship of the Higher Education Academy (AFHEA)
2017	Principles of Tutoring and Demonstrating, ANU
2014	Member of Engineers Australia
2014	Education Officer, Melbourne University Mechatronics Society
2009	Associate in Music, Australia (piano) (AMusA)

REFERENCES

Available upon request.