Cedric Scheerlinck

PhD Candidate

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Google Scholar: https://scholar.google.com.au/citations?user=UU0Ql2wAAAAJ

EDUCATION

2017 – 2020 **PhD candidate in Computer Vision, The Australian National University**

2015, 2016 **Masters of Mechanical Engineering, The University of Melbourne**
Weighted Average Mark: 87% (H1)
Exchange semester ETH Zürich (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**
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 in Computer Vision, ANU**
Australian National University
Supervisors: Prof. Robert Mahony, A/Prof. Nicholas Barnes, Prof. Tom Drummond.
Optical flow computation using event cameras with applications in high-speed aerial robotics, collision avoidance and 3D structure flow estimation.

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 studies on 3D reconstructed coronary arteries.
Proceedings published in Australasian Fluid Mechanics Conference 2016.

09/2015 – 12/2015 **Semester Project (Masters), ETH Zürich**
ETH zürich
Supervisors: Prof. Thomas Rösgen, Dr. Lukas Prochazka.
Institute of Fluid Dynamics. 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.
Designing and building an experimental setup 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 School of Engineering (University of Melbourne)
2015 Melbourne Global Scholars Award (University of Melbourne - ETH Zürich)
2014 Dean's Honours List, Bachelor of Science (University of Melbourne)
2009 Associate in Music, Australia (piano) (AMEB)

PUBLICATIONS

1. 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%)
2. 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%)
3. C. Scheerlinck, N. Barnes, R. Mahony, “Continuous-time Intensity Estimation Using Event Cameras,” Asian Conference on Computer Vision (ACCV), Perth, 2018. (Accept. rate 28%)
4. 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.
5. 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.

CERTIFICATES AND AFFILIATIONS

2017 Associate Fellowship of the Higher Education Academy (AFHEA)
2017 Principles of Tutoring and Demonstrating, ANU
2014 - Today Member of Engineers Australia
2014 Education Officer, Melbourne University Mechatronics Society

PROJECTS

2018 DVS Image Reconstruction (open-source C++ project)
https://github.com/cedric-scheerlinck/dvs_image_reconstruction

REFERENCES

Available upon request.