

Cedric Scheerlinck

PhD Candidate

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Google Scholar: https://scholar.google.com.au/citations?user=UU0QI2wAAAAJ

# **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

University of

Zurich

MELBOURNE

**ETH** zürich

09/2018 - 09/2019 Research Visit, RPG, University of Zurich

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 applications and 3D structure flow estimation.

aerial robotics, collision avoidance and 3D structure flow estimation.

03/2016 – 11/2016 Masters Thesis, 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

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
- 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, <u>C. Scheerlinck</u>, 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

Education Officer, Melbourne University Mechatronics Society 2014

## **PROJECTS**

DVS Image Reconstruction (open-source C++ project) 2018

https://github.com/cedric-scheerlinck/dvs\_image\_reconstruction

#### **REFERENCES**

Available upon request.