

## Personal Information

**Tom F.H. Runia**

Ph.D. Student

University of Amsterdam

[runia@uva.nl](mailto:runia@uva.nl)

[tomrunia.github.io](https://tomrunia.github.io)

I am second-year **Ph.D. student** at the University of Amsterdam, where I am supervised by Cees Snoek and Arnold Smeulders. I work in the fields of computer vision, machine learning and deep learning. The focus of my research is on **understanding video** by learning motion representations. Our **QUVA Deep Vision lab** is a collaboration between the University of Amsterdam and Qualcomm Research.

## Education

- |             |   |
|-------------|---|
| 2016 –      | <b>Doctor of Philosophy (Ph.D.) in Computer Science</b> <ul style="list-style-type: none"><li>• QUVA Deep Vision lab: University of Amsterdam and Qualcomm</li><li>• Deep Learning for Learning Video Representations</li><li>• Advisors: Cees G.M. Snoek and Arnold W.M. Smeulders</li></ul> |
| 2013 – 2015 | <b>Master of Science (M.S.) in Computer Science</b> <ul style="list-style-type: none"><li>• Delft University of Technology</li><li>• Specialization in Intelligent Information Processing</li><li>• With Honors, <i>Cum Laude</i> (GPA 8.5/10, A+)</li></ul>                                  |
| 2008 – 2012 | <b>Bachelor of Science (B.S.) in Applied Physics</b> <ul style="list-style-type: none"><li>• Delft University of Technology</li><li>• Extra 30 ECTs of B.A. Computer Science courses</li></ul>  |

## Employment

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|-------------|---|
| 2014 – 2015 | <b>Research Intern at TomTom</b> <p>Computer vision and machine learning scientific internship as part of my Master's thesis on accelerating object detection in autonomous driving context. This involved research and implementation of high-speed computer vision algorithms using C++ and OpenCL.</p> |
| 2013 – 2015 | <b>Software Engineer at TamTam (now Dept)</b> <p>Back-end developer at the Operational Services division where I worked on some of the largest websites in The Netherlands.</p>   |

- 2012 – 2013      **Research Assistant at Delft University of Technology**  
Assistant in the Quantitative Imaging group at TU Delft where I worked on writing image processing software for super-resolution microscopy.
- 2009 – 2010      **Software Engineer at Innovative Design Delft**  
Part-time back-end developer during my B.S. studies.

## Professional Experience

### Scientific Publications

- Tom F.H. Runia, Cees G.M. Snoek and Arnold W.M. Smeulders.  
**Real-World Repetition Estimation by Div, Grad and Curl.**  
Computer Vision and Pattern Recognition (CVPR), June 2018; Spotlight Presentation.
- Tom F.H. Runia, R. Lukassen, L. Zhang and M. Loog.  
**The System Design of a High-Speed Object Detector.**  
Netherlands Conference on Computer Vision (NCCV), September 2015.

### Awards

- Rewarded the **Ngi-NGN Award** in Computer Science for my MSc. Thesis (€1.000)  
(From: The Royal Holland Society of Sciences and Humanities)

### Teaching

- M.S. Course **Deep Learning** at University of Amsterdam (2017)
- B.S. Course **Information Visualization** at University of Amsterdam (2016)
- **Project Supervision** of B.S. and M.S. student projects in Artificial Intelligence

### Journal and Conference Reviewing

- **PAMI**      IEEE Transactions on Pattern Analysis and Machine Intelligence (2016, 2017)
- **CVPR**      IEEE Conference on Computer Vision and Pattern Recognition (2016 – 2018)
- **NIPS**      Neural Information Processing Systems (2016, 2017)
- **ICCV**      International Conference on Computer Vision (2017)
- **ECCV**      European Conference on Computer Vision (2016)

### Extracurricular Activities

- **Full-Time Board Member** of the Study Association for Applied Physics (2012–2013)
- **Entrepreneurial Study Trip** to Silicon Valley (visiting Google, Apple, Twitch and more)
- **President** of the Electronic Committee at the Study Assoc. for Physics (2008–2012)
- **Editor** of the Quarterly Magazine “De Physics” for the Physics Study Association (2010)