Personal Information

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Ph.D. Student tomrunia.github.io
University of Amsterdam

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 – **Doctor of Philosophy (Ph.D.)** in **Computer Science**
- QUVA Deep Vision lab: University of Amsterdam and Qualcomm
- Deep Learning for Learning Video Representations
- Advisors: Cees G.M. Snoek and Arnold W.M. Smeulders

2013 – 2015 **Master of Science (M.S.)** in **Computer Science**
- Delft University of Technology
- Specialization in Intelligent Information Processing
- With Honors, *Cum Laude* (GPA 8.5/10, A+)

2008 – 2012 **Bachelor of Science (B.S.)** in **Applied Physics**
- Delft University of Technology
- Extra 30 ECTs of B.A. Computer Science courses

Employment

2014 – 2015 **Research Intern** at **TomTom**
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.

2013 – 2015 **Software Engineer** at **TamTam** (now Dept)
Back-end developer at the Operational Services division where I worked on some of the largest websites in The Netherlands.

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)
- **NIPS** Neural Information Processing Systems (2016, 2017)
- **CVPR** Conference on Computer Vision and Pattern Recognition (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)