

# Alexander Schaap

## Software Engineer



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/in/alexanderschaap



aschaap

## Skills



## Projects

**DecAR** - An augmented reality interior decoration app for Android

**CIS\*6320** - An implementation of the Bicubic interpolation algorithm in C++

**CIS\*6650** - A comparative statistical study of SVM kernels, and number of hidden layers in ANN, on 5 UCI datasets

## Education

2017 - Now **Ph.D., Software Engineering**

McMaster University, Canada

2014 - 2016 **M.A.Sc., Software Engineering**

McMaster University, Canada

2009 - 2013 **B.Sc., Computer Science**

Twente University, the Netherlands

## Experience

Jan 2017 - Present **Graduate Research Assistant**

McMaster CERC in Hybrid Powertrain

- Currently researching migration of legacy automotive software (Simulink) towards compliance with the AUTomotive Open Software Architecture (AUTOSAR) standard.

Oct 2016 - Dec 2016 **Research Engineer**

McMaster CERC in Hybrid Powertrain

- Finalized the documentation automation effort from the previous Research Assistant Position (below).

Mar 2014 - Aug 2016 **Graduate Research Assistant**

McMaster CERC in Hybrid Powertrain

- Under the FCA APC LEAP project – a large multidisciplinary project between McMaster University and Fiat Chrysler Automobiles (FCA) to develop next generation high-performance hybrid powertrains.
- Evaluated various symbolic modeling tools and created a detailed comparison between them.
- Worked with domain experts to reverse-engineer, document and analyze several large FCA Simulink models.
- Directed and assisted in the creation of a process and accompanying templates for automated documentation of Simulink models. Included the supervision of an undergraduate student for 16 months with minimal intervention of supervisors.

Feb 2013 - Dec 2013 **IT Manager (part-time)**

Soltree Sustainable Solutions

- Website design, maintenance and management
- Maintaining computer network and communications
- System maintenance and upgrades, and troubleshooting

Sep 2012 - Oct 2012 **Undergraduate Teaching Assistant**

University of Twente, the Netherlands

- Second-year Databases course
- Assisting students with lab assignments and verifying solutions

## Publications

M Bialy, V Pantelic, J Jaskolka, A Schaap, L Patcas, M Lawford, and A Wassyng. "Software Engineering for Model-Based Development by Domain Experts". In: *Handbook of System Safety and Security*. Elsevier, 2016, pp. 39–64.

Alexander Schaap. "Towards Generating Software Modularizations". Master's Thesis. 2016.

Alexander Schaap. "Characterization of tor exit-nodes". In: *Proc. 18th Twente Student Conf.* 2013.

## Awards

2017 Ontario Graduate Scholarship (OGS), awarded \$15,000.

## Service & Outreach

2016-2017 Life in Computing & Software (LiCS), McMaster University VP-Technology