# **Alexander Schaap**

#### Software Engineer

(289) 775 9192

alexander.l.schaap@gmail.com



/in/alexanderschaap



aschaap

#### Skills **OCaml** HTML Haskell **Software** Shell **CSS Scripting Engineering** Linux C++

## Projects -

Dana - Website in Ruby and JS to connect restaurants and charities for donating excess food (in return for advertising), and consumers for deals in said restaurants

- · 3rd prize at DeltaHacks II
- · W Booth Prize for most innovative or entrepreneurial idea

Rehistoric - Simple GUI revision control for the uninitiated, written in C++ and Qt.

Chinese Language Learning App - Android app for learning correct pronunciation, written using Java.

## **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 The-

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