





# ANNA SCHOLTZ

Computer Science Graduate Student at the University of British Columbia

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Vancouver, Canada 

## WORK EXPERIENCE

Since September 2017 // Canada

### Graduate Teaching Assistant @ University of British Columbia

[Project Organization](#) | [Software Planning](#) | [SQL](#) | [Databases](#) | [JavaScript](#) | [Java](#)

- Software Engineering Project: Supervise groups implementing a contractor management system and expense claim system in cooperation with Coast Capital
- Databases: Supported instructor during lectures, held tutorials, supervised project groups that had to implement a database system, held office hours and graded exams

August 2015 - July 2017 // Germany

### Software Engineering Student Employee @ Citrix (later LogMeIn)

[Scala](#) | [Akka](#) | [Spray](#) | [JavaScript](#) | [AngularJS](#) | [Redshift](#) | [S3](#)

- Development of software tools written in Scala for audio problem analysis of GoToMeeting
- Implemented tools for pattern detection in log data and visualization of log files
- Supported implementation of cloud-based data analysis software

May 2014 - December 2015 // Germany

### Student Assistant @ Technische Universität Chemnitz

[C#](#) | [JavaScript](#) | [ASP.NET](#) | [Knockout.js](#) | [WebID](#) | [RDF](#) | [Scientific Writing](#)

- Supported researchers at the chair of "Distributed and Self-organizing Systems"
- Development of approaches based on WebID to enhance the information security in personal data management by web applications
- Implementation of a code annotation tool for migration of legacy software

## SELECTED PROJECTS

Since June 2018 // Canada

### Detecting User Workflows (Master Thesis)

[Scala](#) | [Swift](#) | [Lab Study](#)

- Detection of recurring workflows while working at a computer
- Exploration and customization of different algorithms suitable for detecting temporal patterns in large amounts of data
- Development of tools to support professionals in their repeating work patterns

April 2018 - August 2018 // Canada

### Google Summer of Code 2018 @ Xi Editor Project

[Rust](#) | [Swift](#) | [Search](#)

- Extended Xi Editor to provide advanced search functionality, search using regular expressions and replacements of matches
- Integration of an advanced interface for find and replace into the xi-mac frontend
- Development of a new interface allowing search using multiple queries

September 2017 - December 2017 // Canada

### Sensing Interruptions using Psycho-physiological Sensors

[Python](#) | [Machine Learning](#) | [EEG](#) | [Lab Study](#)

- Explored whether interruptions cause measurable changes using psycho-physiological sensors by analyzing brain activity and head position
- Execution of a controlled lab study with participants working on defined tasks and interrupting them while recording their EEG data
- Machine learning classifier for detecting interruptions in recorded EEG data

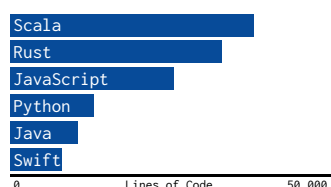
February 2016 - June 2016 // Germany

### Macro-based Serialization to JSON using Scala (Bachelor Thesis)

[Scala](#) | [Scala Macros](#) | [ConTeXt](#)

- High-performance approach to serialize class instances and values to JSON
- Scala macros for generating serialization logic at compile time based on the class structure to increase performance
- Proof-of-concept implementation that outperformed existing state-of-the-art libraries

## SKILLS



- HTML, CSS, Less
- LaTeX, ConTeXt
- Akka, Spray
- WebID, RDF
- MySQL, PostgreSQL
- Redshift, S3

German ●●●●●  
English ●●●●○  
Dutch ●●○○○

## EDUCATION

September 2017 - December 2019 // Canada

### Masters of Computer Science University of British Columbia

March 2017 - June 2017 // South Korea

### Exchange Semester Sungkyunkwan University

October 2016 - September 2017 // Germany

### Masters of Computer Science Technische Universität Chemnitz

- Degree not finished due to transfer to University of British Columbia

October 2013 - September 2016 // Germany

### Bachelors of Applied Computer Science Technische Universität Chemnitz

## PUBLICATIONS

December 2015 // Belgium

### Systematic Composition of Web-based Applications with Focus on Security @ iiWAS2015

June 2015 // Netherlands

### Scope-aware Delegations in Distributed Social Networks @ ICWE 2015

## AWARDS

October 2016 - September 2017 // Germany

### Germany Scholarship

Reward for excellent educational achievements and social commitment

November 2015 // Netherlands

### Black Hat Student Scholarship

## VOLUNTEERING

Since April 2018 // Canada

### Active Contributor to Xi Editor

[Rust](#) | [Swift](#) | [Open Source](#)

Since April 2018 // Canada

### Vice President Finance

- Managing the yearly budget of the Computer Science Graduate Student Association
- Supporting president in organizing social events and the orientation week

January 2015 - July 2015 // Germany

### ISC Student Cluster Competition 2015

[Python](#) | [High Performance Computing](#) | [Optimization](#)

- 2nd place in category "Highest Linpack"
- Responsible for preparing and optimizing the application PyFR and the HPL benchmark

December 2013 - August 2017 // Germany

### Chemnitzer StudentenNetz

[Python](#) | [JavaScript](#) | [Django](#) | [Networks](#)

- Student initiative to maintain the internet connection in the dormitories on the TU Chemnitz campus
- Development of user administration software
- Maintenance of network equipment
- Second-level user support