# ANNA SCHOLTZ

## Computer Science Graduate Student at the University of British Columbia

scholtzan.net

scholtzan

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♥ Vancouver, Canada

## **WORK EXPERIENCE**

June 2019 - August 2019 // USA

#### Firefox Data Engineering Intern @ Mozilla

BigQuery | Python | WebAssembly | Druid | Java | Streaming Data Pipeline

- Developed a framework that allows to execute Python code in user-defined functions in BigQuery by taking advantage of the WebAssembly support
- Created a Stackdriver metric emitter plugin for Druid to enable application monitoring

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 management systems for companies such as Coast Capital, HSBC and Associated Engineering
- Databases: Supported instructor during lectures, held tutorials, supervised project groups, 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

# Undergraduate Research Assistant @ Technische Universität Chemnitz

C# | JavaScript | ASP.NET | Knockout.js | WebID | RDF | Scientific Writing

- Development of approaches based on WebID to enhance the information security in personal data management by web applications that lead to scientific publications
- Implementation of a code annotation tool for migration of legacy software

## SELECTED PROJECTS

Since June 2018 // Canada

#### Context Switch Support with Conceptual Groups (Master Thesis)

Scala | Swift | Lab Study

- Development of an approach that automatically detects groups of applications and resources that developers use and are relevant while working on different projects
- Semantic and temporal pattern analysis of recorded interaction data
- Implementation of tools to support decluttering of workspaces as well as navigating between different projects

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

## **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 2013 - September 2016 // Germany

## **Bachelors of Applied Computer Science**

Technische Universität Chemnitz

## **SKILLS**



#### Data Processing

RDF, MySQL, PostgreSQL, Redshift, S3, BigQuery, Druid

## Frameworks and Libraries

Akka, Spray

#### Web Technologies

HTML, CSS, Less, RESTful Webservices, WebID

#### VOLUNTEERING

Since April 2018 // Canada

#### Active Contributor to Xi Editor

Rust | Swift | Open Source

Worked on annotation, incremental search and auto-indent features

Since April 2018 // Canada

#### **Vice President Finance**

Managing the yearly budget of the Computer Science Graduate Student Association

January 2015 - July 2015 // Germany

#### **ISC Student Cluster Competition**

Python | High Performance Computing

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

## **AWARDS**

October 2016 - September 2017 // Germany

#### Germany Scholarship

Reward for excellent educational achievements and social commitment

November 2015 // Netherlands

#### Black Hat Student Scholarship

Awarded with an Academic Pass for the conference Black Hat Europe 2015