

# JEREMY CHEN

jeremy.yj.chen@gmail.com | +1(226) 978-5759 | Personal Website: [www.jeremy-chen.com](http://www.jeremy-chen.com)

Github: [github.com/jeremychen0127](https://github.com/jeremychen0127) | LinkedIn: [linkedin.com/in/jeremychen2](https://linkedin.com/in/jeremychen2)

## SUMMARY

- Proficient languages: C++, Python, Java, JavaScript, HTML5, CSS, SQL
- Experienced with relational and non-relational databases
- Familiar with distributed systems, object-oriented design, design patterns, and agile methodology
- Developed communication skills through working with product managers and UX designers

## EDUCATION

**Candidate for Bachelor of Computer Science, Co-op**

**University of Waterloo** 2013 - 2018 (Expected)

- Minor in Combinatorics and Optimization

## PUBLICATION

**Graphflow: An Active Graph Database**

**ACM SIGMOD** May 2017

A graph database supporting continuous queries

## PROJECTS

**ARnance - Best FinTech Award in Hack Western 3**

An Android app in augmented reality which renders financial dashboard when scanning company logos

**Pokemon Go Travelling Salesman Problem Solver**

A system which generates efficient routes to collect pokemons using simulated annealing

**Simple4Chat**

A chatroom-oriented messaging web app using Node.js

**Tic-Tac-Toe with Unbeatable Player**

A Tic-Tac-Toe game using MVC architecture in C++ as well as an unbeatable AI player using minimax algorithm

## WORK EXPERIENCE

**Software Developer**

**Query Processing Team, SAP** Jan 2017 - Apr 2017

- Enhanced partition pruning algorithm to improve the performance of query processing in SAP HANA database (a patent is being submitted)
- Implemented SQL grammar rules to utilize data statistics objects for different types of tables

**Full Stack Developer**

**Miovision Technologies Inc.** Apr 2016 - Aug 2016

- Implemented 80% features of the minimum viable product of a real-time organizational management system using Node.js, React, and MongoDB
- Implemented visualizations of OKRs and organizational structures using D3.js
- Improved system performance by reducing 90% of loading time by optimizing data requests and caching

**Software Engineer**

**Dematic Limited** Aug 2015 - Dec 2015

- Improved the performance of product configuration by compressing configuration files to 40% using Java
- Implemented a system which analyzes and visualizes testing metrics to show the quantity and quality of product testing using Node.js and D3.js
- Implemented automated deployment to improve the efficiency and effectiveness of product testing by 70%

## RESEARCH EXPERIENCE

**Voluntary Undergraduate Research Assistant**

**Graphflow, University of Waterloo** Jan 2017 - Apr 2017

- Implemented the viewer of execution plans of a graph database using Java

**Undergraduate Research Assistant**

**Shortest Paths, University of Waterloo** Sept 2016 - Jan 2017

- Prototyped graph database indices that improve efficiency of processing short-path queries on large graphs with at least a billion edges using Java