

# MICHAEL CHI

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## QUALIFICATIONS

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**Languages:** JavaScript, Scala, C#, Java, C++, HTML/CSS

**Frameworks:** Node, AngularJS, React, Express, jQuery, ASP.NET

**Databases:** PostgreSQL, MySQL, Redis, Microsoft SQL Server

**Tools:** Linux, Git, AWS (RDS, EC2, S3), Vagrant, Jira, Visual Studio

**Coursework:** Compilers, Operating Systems, Algorithms & Data Structures, Digital Computers

## WORK EXPERIENCE

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**Sortable**, *Software Developer*, Kitchener, ON

Jan. 2018 - April 2018

- Developed auto-logging features and report parser for the new reporting platform, used by all internal staff and beta customers. Leveraged S3 to improve storage persistency.
- Implemented report scheduling system with Scala and AngularJS that applies CRUD operations to PostgreSQL, and reducing manual tasks by 2hrs/day
- Built custom domain-specific language with JavaScript to encapsulate SQL queries, reducing error rates and querying time by 10%
- Migrated 100k-row databases from RDS to EC2 instances with the pgloader library

**IBM**, *Core Software Developer*, Toronto, ON

May 2017 - Aug. 2017

- Implemented RESTful API with Node to control Single Sign-On configurations and authentication, leveraged Redis to cache certificates, and created UI with React
- Designed and built a Node/React-based IP Whitelist System, working with Secure FTP server, CRUD operations, and calling API endpoints
- Wrote 50+ Node/Mocha unit tests to validate API endpoints and CRUD operations against PostgreSQL database, increasing code coverage by 23

**Scotiabank**, *Technical Analyst*, Toronto, ON

Sept. 2016 - Dec. 2016

- Optimized querying algorithm by 50% and created stored procs and triggers in SQL Server
- Built web application with C#/JavaScript/Bootstrap to migrate Excel spreadsheets to SQL Server tables
- Implemented AJAX, bulk search, and paginations to web applications used by investment bankers

## PROJECTS

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**Currency Converter (Uwaterloo Engineering Hackathon)**

- Developed a real-time currency converter app using Java and currencyLayer API
- Implemented currency conversion algorithms and wrote unit tests

**Personal Portfolio (michaelchi.me)**

- Designed and built a personal portfolio website using CSS flexbox, Materialize CSS and Node/Express
- Implemented email functionality using Nodemailer with OAuth2

## EDUCATION

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**University of Waterloo**

3A Computer Engineering

Fall 2015 - Current