

# Samuel M. D. Chan

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## Education

2012.09–2017.06

### University Of Ottawa

- Honours Bachelor of Science with a Double Major in Computer Science and Criminology, Magna Cum Laude
- Cumulative Grade Point Average: 8.89
- Dean's List for consecutive years since 2012
- Awarded University of Ottawa's Admission Scholarship of \$12,000 over four years

## Employment History

2015.05–Present

### IM Technician Support at Natural Resources Canada, Ottawa, ON

- Full-stack web development in PHP and JavaScript on Natural Resources Canada's Geodetic Reference Systems
- Developed several web and intranet applications displaying all sorts of data on graphs using flot library
- Resolved security issues such as cross-site scripting and browsable directories
- Assisted in updating the database
- Assisted in creating new tables in the database
- Wrote PHP and Python scripts for internal use for management of database
- Updated front-end framework from Web Experience Toolkit 3 to Web Experience Toolkit 4
- Added a web feature of downloading dynamically generated PDFs of station reports using TCPDF

2015.05–2015.08

### Intern at Ottawa Chinese Bible Church

- Directed Superhero Camp for kids: build schedule, organized games, promoted camp, recruited volunteers, lead music and dance
- Participated in weekly Friday Youth Fellowship activities

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| 2011.06–2014.11               | <b>McDonald’s Restaurant, Orillia and Ottawa, ON</b> <ul style="list-style-type: none"> <li>● Employee of the month in August, 2012</li> <li>● Developed effective organizational and communication skills, assembling orders and maintaining cleanliness</li> <li>● Assumed a leadership role bringing in and organizing stock, as well as making suggestions to manager ordering stock for the week</li> </ul> |
| 2009.06–2009.08               | <b>Indian Curry Hut, Akureyri, Iceland</b> <ul style="list-style-type: none"> <li>● Cashier and cleaner</li> </ul>   |
| Summers of 2008<br>2009, 2010 | <b>Svalbarðsstrandarhreppur Municipality, Iceland</b> <ul style="list-style-type: none"> <li>● Summer Community Youth Worker</li> <li>● Grounds maintenance on both public and senior spaces</li> </ul>  |

## **Software Development Skills**

- Skilled at identifying software requirements
- High level of understanding over various sorting methods including merge-sort and bucket sort
- Understanding of object-oriented programming and concepts such as inheritance and polymorphism
- Understanding of different architectural patterns including MVC and Client-Server
- Comprehension of testing strategies including white-box testing, and sandwich integration testing
- Grasp of different design patterns including delegation pattern, singleton pattern, and general hierarchy pattern
- Experience building UML diagrams and state diagrams
- Used Git, Gitflow, and SourceTree for version control
- Grasp of the World Wide Web and its use of Uniform Resource Identifiers and Hypertext Transfer Protocol
- Skilled at calculating worst case runtime
- Learned optimization strategies such as the Simplex algorithm

## Programming Languages

### Java

- Fluent in Java development
- Skilled with data structures including binary trees, hash-tables, and matrices
- Skilled in debugging and using JUnit
- Used GUI in school project

### Ruby On Rails

- Completed course on Ruby in *Codecademy*
- Used Ruby on Rails for a final project on developing a client-server web application, including user interface

### HTML and CSS

- Completed a course on HTML and CSS in *Codecademy*
- Experience using Bootstrap 3 for personal projects
- Experience using Web Experience Toolkit 4, another front-end framework

### JavaScript

- Fluent at using JQuery, including its AJAX methods
- Used JavaScript for creating, maintaining, and updating web applications for the Geodetic Reference Systems branch in Natural Resources Canada

### SQL

- Skilled at reading and manipulating XML files
- Experience using PostgreSQL, MySQL and Oracle for data queries
- Understanding of normalization
- Used PostgreSQL as a database for a final project on developing a web application with PHP

### PHP

- Completed course on PHP in *Codecademy*
- Experience using PHP to design a client-server web application
- Experience using PHP to take text and log files, read them, and insert relevant data into a database

### Other languages

- Worked with R, Prolog, Scheme, Python, and Perl in academic courses

## **Volunteer Work and Extracurricular**

2017.05–Current	<b>Blog: A Cowboy with no Cows</b> <ul style="list-style-type: none"><li>• Designed and currently managing my own blog website</li><li>• Laravel 5.4 PHP Framework</li><li>• jQuery</li><li>• Bootstrap 3</li><li>• <a href="http://www.cowboynocows.com">http://www.cowboynocows.com</a></li></ul>
2016.09–2017.04	<b>Ottabotics</b> <ul style="list-style-type: none"><li>• Student robotics club</li><li>• Made a simple autonomous vehicle that competed internally</li></ul>
2016.09–Present	<b>Youth Group Leader at Ottawa Chinese Bible Church</b> <ul style="list-style-type: none"><li>• Organizing Friday youth group events with other leaders</li></ul>
2015.04–2016.04	<b>EECS Undergraduate Representative at the Faculty Council</b> <ul style="list-style-type: none"><li>• Attended faculty meetings to represent the undergraduate students</li></ul>
2014.10–2015.01	<b>Veritas Event on University of Ottawa Campus</b> <ul style="list-style-type: none"><li>• Represented Intervarsity Christian Fellowship</li><li>• Organized and advertised the event in collaboration with several other campus clubs</li></ul>
2014.09–2016.04	<b>Small Group Leader with IVCF</b> <ul style="list-style-type: none"><li>• Attend regular meetings</li><li>• Develop, organize, and promote events</li><li>• Co-lead Bible studies</li></ul>
2014.09–2014.09	<b>OCBC Gotta Move! Fitness Camp</b> <ul style="list-style-type: none"><li>• Children's Evangelistic Fellowship Training</li><li>• Collaborate games</li><li>• Actively caring for the children</li></ul>
2014.02–2014.04	<b>Foot Patrol on University Ottawa Campus</b> <ul style="list-style-type: none"><li>• Provide safe walks</li><li>• Be the eyes of security on campus</li></ul>
2009.09–2010.06	<b>President of Student Council Valsárskóli, Iceland</b> <ul style="list-style-type: none"><li>• Raised fund for school trip to Denmark</li></ul>