

## TECHNICAL SKILLS

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### LANGUAGES

- C, C++, Python, C#, Bash, Ruby on Rails, Processing, HTML, CSS, JavaScript, PHP

### OPERATING SYSTEMS

- Linux, Mac, Windows

### DATABASE MANAGEMENT

- PostgreSQL, SQL Server 2008, MySQL

### TOOLS

- Microsoft: Office (Word, Excel, PowerPoint, Outlook), Visual Studio
- Design: Axure RP, Illustrator, Photoshop, Lightroom, Muse, InDesign
- Testing: Google Test, ACTS, Major, PIT, libFuzzer, FuzzFactory, Maven, IntelliJ
- Services: IaaS - Google Cloud Platform (Compute Engine), Digital Ocean; PaaS - Heroku
- Others: Github, JIRA, Confluence, HP Quality Centre, Postico, Cloud9, Teraterm, POS Tagger

## TRANSFERABLE SKILLS

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- Strong communication skills, both verbal and written
- Fast learner, open to new ideas
- Prioritizes workload to be more productive during projects
- Ensure tasks are completed within deadline
- Able to work independently and as a team player
- Self-motivated, energetic, responsible
- Fluent in English and Mandarin

## WORK EXPERIENCE

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SIERRA WIRELESS (Wireless Communication Company)

MAY - DEC 2019

*Software Test Engineer, R&D SWI Module Integration*

- Reduced 20% of test execution time by developing 10+ Python and C# scripts to replace manual testcases (firmware upgrades, file transfers, AT commands)
- Performed manual and automation testing on LPWA modules in different operating systems, using various lab equipment (network simulator, temperature chamber)
- Conducted stress tests on 4 product types simultaneously to mitigate errors
- Worked closely with members of the Software, Hardware, Firmware teams to debug errors, opening and closing JIRA tickets when necessary
- Communicated with different modules by issuing AT commands via Teraterm
- Assisted in process of hiring new co-ops, provided on-going training to new team members

CLOUDBOX INC. (VoIP Phone Company)

SEP - DEC 2017

*National Cluster Monitoring & Alerting DevOps*

- Installed and tested monitoring and statistics collection tools and plugins on DigitalOcean Ubuntu via CLI
- Developed bash scripts to perform traceroute and mtr tests, importing CSV data into PostgreSQL
- Analyzed performance data collected from key system metrics to create graphs and generate insights to support key business decisions
- Created maps to showcase distance between clients and datacenters to improve operational efficiency based on location of IP addresses using SQL queries
- Separated probe and database logic to prepare for production on various probes (BusyBox, EdgeOS)



## PROJECTS

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TEXTUAL ANALYSIS | [github.com/emilieyyu/cmpt318](https://github.com/emilieyyu/cmpt318)

FEB – APR 2019

- Led team of 4 to analyze corpora using various techniques and extract meaningful insights
- Analyze text based on tokens, types, frequency, n-grams, content words (Lookahead POS Tagger)
- Developed bash scripts to automate the process of text format to extract and analyze corpora

BATTLESCRIPTS WEB BROWSER GAME

OCT - DEC 2018

- Collaborated with four other students to develop client and server side web game with MySQL, Laravel framework, HTML, CSS, JS, PHP
- Multi-player logic game built using Unity Web GL hosted on GCP
- Players can play cards that contain blocks of code, either to overflow or underflow opponents' points
- First person to overflow/underflow opponents three times, or set own score exactly to zero wins

HANDYMAN MOBILE APP – [jz3xo0.axshare.com](https://jz3xo0.axshare.com)

SEP – NOV 2018

- Worked as a group using Axure RP to develop and design a mobile application for home repairs
- Incorporated various design principles in vertical and horizontal prototypes
- Attempts to solve problem for all types of users through text, videos, virtual reality, and expert mode

SFU BOOKCLUB WEB APP – [sfubookclub.herokuapp.com](https://sfubookclub.herokuapp.com)

MAY - AUG 2017

- Group project using Ruby on Rails framework, HTML, CSS, and JavaScript to develop a server side web application via Heroku
- Applied scrum and agile development methods with two-week sprints and meetings in between
- Uses various gems and APIs within the web application
- Incorporated properly functioning users and admin with login
- Students can post textbooks to sell for other uses of the site and comment on other posts they are interested in buying

MOUNT MONSTROSITY INTERACTIVE GAME – [youtu.be/fA07gfCD9wQ](https://youtu.be/fA07gfCD9wQ)

SEP – DEC 2016

- Developed with object oriented programming, Processing
- Used UML to help illustrate the relationships between objects
- Developed an interactive game between player and characters involving three levels of difficulty
- Player can use different keys on keyboard to move and interact with different objects within the game
- Became familiar with class, superclass, subclass, polymorphism, and inheritance

## EDUCATION

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SIMON FRASER UNIVERSITY

SEP 2015 - CURRENT

- Bachelor of Applied Science, Major in Computing Science

## INTERESTS

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- Enjoy playing piano, obtained RCM Grade 10 certificate
- Passion in sports, such as skating, swimming, taekwondo, and hiking
- Using design softwares to create and enhance photos