# Taylor McOuat Computer Engineering Student

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### **TECHNICAL SKILLS**

### Computer

- C++
- MATLAB
- Excel VBA
- Java
- Python

### Tools

- GitHub
- IntelliJ
- ANTLR
- Visual Studio
- Microsoft Office

#### Certifications

- WHIMIS
- First Aid and CPR
- Alberta Class 5 GDL Driver's License

### **EDUCATION**

### **University of Calgary**

Bachelor of Science - Chemistry (with distinction)

GPA: 3.62 / 4.0

# **University of British Columbia**

Bachelor of Applied Science - Computer Engineering

Co-op: Available for 4 or 8 months beginning May 2021

CGPA: 88%

# 2014 - 2018

# **Expected 2024**

### **TECHNICAL WORK EXPERIENCE**

# Balancing Pool, Calgary, Alberta

**Power Analyst** 

- Part time: September, 2020 Current Built fundamental supply and demand scenarios to forecast short term hourly power prices daily
- Implemented offer control model with global maxima finder using MATLAB to optimize daily profits
- Leveraged Excel VBA for statistical analysis on Alberta electricity supply/demand data
- Cooperated in managing portfolio with trading team and recorded +\$100 million in profits for 2020
- Automated daily procedures with VBA and Python

### **ENGINEERING STUDENT TEAMS**

# **BioT, UBC Envision**

### Instrumentation Team Member

September, 2018 - May, 2019

Full time: July, 2019 - August, 2020

- Collaborated with a team of Engineering students to create an automated beer brewing system designed to monitor and control process variables in real time
- Organized and performed preliminary data analysis using MATLAB and VBA

# **TECHNICAL PROJECTS**

# **Multithreaded Wikipedia Server** School Group Project

December 2020

- Created a server that accepts JSON-formatted requests for information on Wikipedia and responds with appropriate information
- Utilized GitHub to work effectively with group members on separate branches, merging when necessary to preserve a clean main branch
- Designed program with concurrent framework and ensured thread-safety for multiple users

Portfolio Website October 2020

### Personal Project

• Designed and developed an interactive website that contains my technical and academic experience along with a showcase of my personal and academic projects

- Back-end of website written in Python, utilizing the Flask web framework
- Front-end of website written in HTML, CSS, and JavaScript. Utilized pre-made bootstrap packages.
- Website deployed on a remote Linux server

### **OTHER WORK EXPERIENCE**

# Calgary Drop In & Rehab Centre, Calgary, Alberta Community Engagement Intern

May, 2019 - August, 2019

- Support execution of community engagement programs for schools, tour groups, meal sponsors, and other potential engagement opportunities
- Executed day-to-day activities involving volunteers, tours, public education, advocacy, meal services groups and proactive and reactive engagement

### Chestermere Recreation Center, Chestermere, Alberta Senior Camp Leader / Assistant Coordinator

May, 2017 - August, 2018

- Collaborated with coordinator to develop supply lists, schedules, operating procedures and emergency protocols to be implemented for the summer
- Interacted in a presentable and friendly manner with parents to ensure confidence in the program and to provide feedback on any potential issues with children in care
- Supervised and lead activities for the children in the program

### **VOLUNTEER EXPERIENCE**

# CIBC Run for the Cure, Calgary, Alberta General Volunteer

October, 2013 - Current

- Assist with set up and take down of race day equipment
- Managed water/energy drink station

### **AWARDS**

University of British Columbia Dean's Honour List University of Calgary Faculty of Science Dean's List Jason Lang Scholarship 2019 2016 & 2018 2015 & 2016

### **INTERESTS & ACTIVITIES**

- Former member of Calgary based Improv group The Kinkonauts
- Swimming, tennis, video editing, travelling, baseball