# WALKER HILDEBRAND

204 898 4936 wbhildeb@uwaterloo.ca

• walkerhildebrand.com

#### TECHNICAL STRENGTHS

**Languages**  $C++\cdot C\# \cdot Bash \cdot Java \cdot SQL \cdot MongoDB \cdot Python \cdot Javascript \cdot Node.js$ 

 $\textbf{Tools} \hspace{1cm} \textbf{MFC} \cdot \textbf{Angular} \cdot \textbf{Express} \cdot .\textbf{NET} \cdot \textbf{UNIX} \cdot \textbf{Git} \cdot \textbf{VSCode} \ a ficionado$ 

#### WORK EXPERIENCE

Rocscience | Software Developer

Jan 2019 - Present

World leader in providing advanced geotechnical software to civil engineering and mining industries

- Constructed a CAD module for creating advanced 3D embankments, using C++ and MFC
- Upgraded geometric and mathematical tools, using more efficient & accurate, graph theory methods
- Redesigned and improved several modules, improving cohesion, maintainability and abstraction

Payworks | Software Developer

May 2018 - Oct 2018

National provider of cloud-based payroll and workforce management systems

- Deployed the automated testing framework, developing it in C# from a preliminary phase
- Played a major role in the design and implementation of the framework's core architecture
- Reinvented the method of interacting with components on the site, greatly improving maintainability
- Utilized advanced design patterns to abstract and encapsulate the construction of elements

Sweet Tops Ice Cream | Freelance Developer

May 2017 - Aug 2017

Small business that I approached with a solution to their issues managing 30+ part-time employees

- Developed a Java application to assist in payroll, scheduling and employee management
- Implemented automatic pay calculation, schedule distribution, and schedule conflict detection
- Integrated a relational database to store employee and schedule data using SQLite3 and JDBC

### SIDE PROJECTS

C EasyDocs (DeltaHacks V) (Python, SQL, Django & Javascript)

January 2019

- Developed an online application to aid general practioners in tracking patient medical data
- Implemented detection of potential treatment conflicts and medical concerns based on family history, medical conditions, current treatments additional other personal infomation
- Designed an intricate **SQL** database for treatments, appointments, patients and medical conflicts

• Multiquadris (C++)

December 2018

- Created a multiplayer, command line version of Tetris, with special actions and varying difficulties
- Done as a final project, I received a grade of 105% for excellent design and additional features

Please see my projects page for more

# **EDUCATION**

University of Waterloo

Expected Jun 2022

Bachelor of Computer Science

President's Scholarship of Distinction

## **AWARDS**

Third place in University of Manitoba Math Contest	2017
Top 15% in Euclid Mathematics Contest	2017
Certificate of Distinction in Fermat Mathematics Contest	2016

Winnipeg School Division Book Awards for Academic Achievement (x3) 2014 - 2016