

WALKER HILDEBRAND

204 898 4936 wbhildeb@uwaterloo.ca

🐙 wbhildeb in wbhildeb 🌐 walkerhildebrand.com

TECHNICAL STRENGTHS

Languages C++ · C# · Bash · Java · SQL · MongoDB · Python · Javascript · Node.js
Tools MFC · Angular · Express · .NET · UNIX · Git · VSCode aficionado

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 - Present*

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

🐙 **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 recieved a grade of 105% for excellent design and additional features

Please see my projects page for more

EDUCATION

University of Waterloo

Bachelor of Computer Science

Expected Jun 2022

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*