




WALKER HILDEBRAND

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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 a more efficient, **graph theory** based approach
- Redesigned several existing geometric 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

 **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 at www.walkerhildebrand.com/projects for more

EDUCATION

University of Waterloo

Bachelor of Computer Science (81% avg)

Expected Jun 2022

President's Scholarship of Distinction

AWARDS & ACHIEVEMENTS

Third place in University of Manitoba Math Contest *2017*

3 WSD Academic Achievement Awards and placed in top 15% in national math contests *2014-2017*

Manitoba Provincial Record - 400m Medley Relay *2010-Present*