

# Wolf Van Dierdonck

✉ wvandier@uwaterloo.ca | 🌐 wolfdierdonck.me | 🐙 Github | 🔗 LinkedIn

## SKILLS

### LANGUAGES

JavaScript, C#, PHP, C/C++, Python, Java, HTML/CSS

### TECHNOLOGIES

React, Flask, Azure, PostgreSQL, Heroku, Unity, Xamarin, GCP, Nginx, Git, Unix

## EXPERIENCE

### RELOGIX | SOFTWARE DEVELOPER

Ottawa, ON | Oct 2019 – Feb 2020

- Reduced development and installation times by creating an internal tool with **Xamarin** that uses NFC to communicate with IoT devices.
- Improved cross-device communication speed by **40%** by implementing a custom encryption scheme.
- Optimized memory usage by **70%** by implementing **Google Protobuf** to efficiently serialize structured data.
- Has been adapted by all Relogix installation teams.

## PROJECTS

### DOXMY.TECH | REACT, FLASK, POSTGRESQL, AZURE

[Github !\[\]\(95b425611cbd2b8716a140cf67c81822\_img.jpg\)](#)

- Built and deployed a full stack web application using **React, Flask, Python, and PostgreSQL** allowing users to analyze their social media profiles.
- Developed data pipelines allowing social media data to be cleaned, formatted properly and stored in a **PostgreSQL** database.

### CHIP8.XYZ | REACT, JAVASCRIPT

[Github !\[\]\(3342c215b2a8b663596a81468d5dc314\_img.jpg\)](#)

- Developed and deployed a **Chip8 Emulator** using **React.JS** capable of running any program designed for CHIP8 hardware.
- Created a system to dynamically convert binary data into a stream of executable functions to run user-created software.

### GRAMMAR HAMMER | PYTHON, JAVASCRIPT, PHP, AZURE, HEROKU

[Github !\[\]\(19d44b37fb4fa155bf9d60c77a3d3cb2\_img.jpg\)](#)

- Spearheaded the creation of a device that gives physical feedback based on the correctness of users' spoken grammar.
- Trained a **NLP model** to check sentences for grammatical correctness with **80%** accuracy.
- Created a system to allow for communication between a **Heroku server** and Arduino client.

### AR GRAPHER | C#, UNITY (HACK3 FIRST PLACE PRIZE)

[Published on Google Play !\[\]\(23a2e9ddc7bb0ef55393d38b772a848d\_img.jpg\)](#)

- Created an Android app using **Unity** that displays the graphs of 3D mathematical functions in augmented reality based on user input.
- Engineered a computer algebra system in **C#** to solve multi-variable algebraic equations.

## EDUCATION

### UNIVERSITY OF WATERLOO

2020 - Present

Bachelor of Software Engineering (BSE) Candidate | GPA: 4.0