

Wolf Van Dierdonck

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SKILLS

LANGUAGES **C#, C/C++, Java, Python, HTML/CSS, JavaScript, PHP**
TECHNOLOGIES **Azure, Unity, Heroku, Xamarin, Google Cloud, 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

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

[Github](#) 

- 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**.
- Implemented the **Azure** Speech API to transcribe speech into text.

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

[Published on Google Play](#) 

- Developed 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 multivariable algebraic equations.

REMOTE VOICE CONTROLLED CAR | C#, XAMARIN

[Github](#) 

- Built a toy car with an Arduino able to be controlled remotely via speech commands.
- Implemented a system to dynamically create **C#** functions at run-time.

EDUCATION

UNIVERSITY OF WATERLOO

2020 - Present

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