# Wolf Van Dierdonck

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# **SKILLS**

PROGRAMMING LANGUAGES
TECHNOLOGIES

C#, C/C++, Java, Python, HTML/CSS, JavaScript, PHP Azure, Google Cloud, Heroku, Unity, Xamarin, Git, Unix

#### **EXPERIENCE**

### RELOGIX | SOFTWARE DEVELOPER (INTERN)

Ottawa, ON | Oct 2019 - Feb 2020

"I highly recommend Wolf for challenges that require a combination of analytical skills, computer programming, persistence and teamwork."

- Reduced development and installation times by creating a mobile app with Xamarin that uses NFC to communicate with Internet-of-Things devices. Has been adapted by Relogix's installation teams.
- Improved cross-device communication speed by 40% by implementing a custom encryption scheme.
- Reduced memory usage by 70% by implementing Google Protobuf to efficiently serialize structured data.

## **PROJECTS**

#### WSMAC | PYTHON, JAVASCRIPT, PHP, AZURE, HEROKU

#### github.com/WolfDierdonck/WSMAC

- Collaborated with a small group to create a device that gives physical feedback based on the correctness of users' spoken grammar.
- Trained a Natural Language Processing model to check sentences for grammatical correctness.
- 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

#### github.com/WolfDierdonck/AR-Grapher

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

#### REMOTE VOICE CONTROLLED CAR | C#, XAMARIN, GOOGLE CLOUD github.com/WolfDierdonck/RVCC

- Created a toy car able to be controlled remotely using speech commands.
- Implemented a system to dynamically create C# functions at run-time.

#### **HACKATHONS**

- Hack3 First Place Prize
- Hack the North attendee

# **EDUCATION**

UNIVERSITY OF WATERLOO

2020 - 2025 (Expected)

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