

# Wolf Van Dierdonck

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## 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 by implementing a custom encryption scheme.
- Reduced memory usage by implementing Google Protobuf to efficiently serialize structured data.

## PROJECTS

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

- 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

- 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

- 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

## SKILLS

### PROGRAMMING LANGUAGES TECHNOLOGIES

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

## EDUCATION

### UNIVERSITY OF WATERLOO

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

2020 - 2025 (Expected)