

Wolf Van Dierdonck

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Education

University of Waterloo / Bachelor of Software Engineering (92.5% GPA) Apr 2025 Graduation

- Received **First in Class Engineering Scholarship** for 2023.
- Placed on **Term Dean's Honours List** three times for outstanding academic performance.

Experience

Roblox / Backend SWE Intern San Mateo, CA / May 2024 – Aug 2024

- Created tool to inspect request/response data in production, speeding up debugging & development
- **Improved throughput** of backend processing service **by 12x** to reduce required machines from 100 to 8
- Developed component testing framework for internal tracing library to reduce bugs and improve velocity

Databricks / Performance SWE Intern Mountain View, CA / Jan 2024 – Apr 2024

- Designed and implemented a time-series database in SQL to optimize cost and scalability of metrics
- Performed a **performance analysis** of the table creation flow to improve performance by **30%**

Cruise / Backend SWE Intern San Francisco, CA / May 2023 – Aug 2023

- Worked on high-fidelity simulation engines in C++/Python to improve autonomous vehicle performance
- Enhanced simulations by enabling runtime state injection, improving test flexibility and QA velocity

Spatial Systems / Full-Stack SWE Intern San Francisco, CA / Sep 2022 – Dec 2022

- Decreased app size by **60%** using dynamic loading and compression, improving load time by **5 seconds**
- Created a system to track and aggregate user analytics in React and TypeScript

Spatial Systems / VR SWE Intern Remote / Jan 2022 – Apr 2022

- Developed raycasting-based 3D algorithm to identify user focus in Virtual Reality environments

Behaviour Interactive / Full-Stack SWE Intern Remote / May 2021 – Aug 2021

- Created client-side state prediction system to improve concurrent request and error handling support

Projects

AR Grapher / Hack3 First Place Prize

- Created and published an Android app using **Unity** that displays graphs in AR based on user input
- Designed a computer algebra system in **C#** to solve multi-variable algebraic equations, increasing computation speed by **97%** relative to language built-in

Automated Proof Checker

- Developed algorithms to scan, parse, and verify correctness of formal logic proofs in Natural Deduction

Skills

Languages C++, Go, Python, C#, TypeScript, SQL, Scala, Rust, HTML+CSS, Bash

Technologies gRPC, Docker, Kubernetes, AWS, Bazel, Unity, Redux, WebAssembly