# PAUL KOKHANOV

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#### **EDUCATION**

#### University of Waterloo

Waterloo, ON

Bachelor of Science in Electrical Engineering - Cumulative GPA: 92.91%

Sept. 2020 - Expected Apr. 2025

Relevant Courses: Co-operative and Adaptive Algorithms , Algorithms and Data Structures

#### **PROJECTS**

#### Fishing Simulator - (github.com/PaulKokhanov1/FarmingSimulator)

Technologies: Unreal Engine 5

- Developed a genetic algorithm using C++ to create an evolving ecosystem of fish with unique traits and behaviors
- · Designed a versatile fishing mechanism adaptable for various applications, ensuring scalability across environments

## Binding of Issac Remake - (github.com/PaulKokhanov1/BindingofIssacRemake)

Technologies: GIMP, Unity

- Remade the "Binding of Issac" video game using Unity and C# alongside creating sprites with GIMP
- Implemented procedural generation of the dungeon and enemies for each level
- Managed and Improved overall performance through the use of the Unity Profiler

#### C++ Fluid Simulation - (github.com/joaquintb/comp\_arch\_23)

Technologies: CLion

- Programmed, using C++, a fluid simulation that implements Smoothed Particle Hydrodynamics
- Collaborated amongst a team of 4 to create understandable & reusable code following proper coding architecture

## Lunar Lander RL - (github.com/PaulKokhanov1/LunarLanderRL)

Technologies: MLAgents, Unity

- Developed and trained an ML agent to autonomously land a 2D "Lunar Lander" within confined parameters
- Combined reinforcement learning strategies such as Curriculum learning and Imitation learning

## VR Escape Room - (github.com/georgia-alpajaro/Quest3\_Escape\_Room)

Technologies: Meta SDK, Photon Fusion 2

- Launched a VR Escape Room game leveraging Meta's Interaction & Voice SDK with various Mixed Reality additions
- Implemented Host/Client server based multiplayer using Photon Fusion 2

#### **EXPERIENCE**

#### HCI VR Research Assistant | University of Waterloo

Feb. 2024 - Apr. 2024

(github.com/PaulKokhanov1/vr-bimanual)

- Created a VR interaction application using Unity and Meta's Oculus SDK to research efficiency of various menu techniques by conducting experiments on participants
- Designed study procedure to be used on individuals, involving Radial & Marking menu to compare against FastTap menu selection

## **Software Developer Intern** | *TextNow*

May. 2022 – Aug. 2022

- Developed multiple key features for the TextNow Android App with over 10M+ daily users as part of the Platform Team
- Implemented and shipped Google's conversation "Bubbles" feature to end users, enabling them to more easily interact with the app through notifications
- Investigated and provided solutions to various startup performance issues found using stack traces in order to improve application launch time by  $\sim$  250 ms
- · Ensured app reliability through high unit and automation test coverage using the JUnit framework

## **TECHNICAL SKILLS**

Programming Languages: Python (3 Years), C++ (2 Years), C# (1 Year), Kotlin (1 Year)

Technologies: Unreal Engine 5, Unity, Git, Visual Studio, Meta VR SDK