

PAUL KOKHANOV

✉ paul.kokhanov@gmail.com | [in linkedin.com/in/paulkokhanov](https://www.linkedin.com/in/paulkokhanov) | paulkokhanov.com

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

TECHNICAL SKILLS

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

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

EXPERIENCE

HCI VR Research Assistant | University of Waterloo

Feb. 2024 – Apr. 2024

(github.com/PaulKokhanov1/vr-bimanual)

- Created a VR application using Unity and Meta's Oculus SDK to evaluate the efficiency of various menu navigation techniques
- Designed an experimental study procedure on user interaction, comparing Radial & Marking menu against a FastTap menu for usability, precision and speed
- Collaborated with faculty to refine experiment methodologies, increasing the accuracy of usability results

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 ~ 250 ms
- Boosted app stability by increasing unit and automation test coverage by 5%, using the JUnit framework to proactively reduce post-release issues, leading to fewer crashes and improved user experience

PROJECTS

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

Technologies: Unreal Engine 5

- Engineered a simple genetic algorithm using C++ to simulate an evolving ecosystem, yielding 1,000,000 unique fish
- Designed a versatile fishing mechanism adaptable for various applications, ensuring scalability across environments
- Created intuitive user interfaces by leveraging UMG to clearly communicate real-time feedback

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

Technologies: GIMP, Unity

- Remade the "Binding of Issac" game using Unity, enhancing gameplay with custom C# scripts & asset management
- Implemented procedural dungeon generation using a mix of customized BFS and grid-based patterns
- Optimized performance with Unity's Profiler, reduced frame rate drops by 10% and cut memory usage by 15%

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

Technologies: MLAgents, Unity

- Tuned and trained an AI agent with Unity's ML-Agents Toolkit achieving a 95% success landing rate within 2M steps
- Applied Curriculum learning & Imitation learning to lessen training time by 40% while maintaining accuracy
- Calibrated hyperparameters resulting in a 20% increase in agent's performance across diverse initial conditions

VR Escape Room - (github.com/georgia-alpajaro/Quest3_Escape_Room)

Technologies: Meta SDK, Photon Fusion 2

- Launched a VR Escape Room game in Unity, integrating Meta's Interaction & Voice SDK with Mixed Reality features
- Coded scalable multiplayer with Host/Client architecture using Photon Fusion 2, supporting 10 concurrent players
- Enhanced gameplay experience with a 10% reduction in memory usage using Unity's profiler tool