# Sankeeth Ganeswaran

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#### Education

University of Waterloo

Bachelor of Computer Science, Co-op

Sept. 2021 - April 2026

Waterloo, ON

## Technical Skills

Languages: C#, C++, JavaScript, TypeScript, Python, Java, Kotlin, C, SQL, HTML/CSS, R, ActionScript 3

Frameworks: Unity, Unreal Engine, JavaFX, TensorFlow, PyTorch, Android, React, Flask, Swing, JUnit

Developer Tools: Git, Docker, Blender, Gradle, Postman, AWS, Oculus

Libraries: Pygame, NumPy, ThreeJS, Photon PUN, Unity VR, OpenAI Gym, JSoup

# Experience

## **Incoming Software Engineer**

Jan. 2025 – April 2025

X (formerly Twitter)

• Core Services Team

Palo Alto, CA

# Game Developer

Sept. 2023 - Aug 2024

ArenaX Labs

 $Toronto. \ ON$ 

- Developed features and machine learning systems for AI Arena, a platform fighter with 200k+ active players.
- Implemented core gameplay mechanics for the combat system in **JavaScript**, ranging from **finite state logic**, **animation systems**, **projectile physics**, **collision handling**, and implementing **20**+ unique **elemental VFX** in **ThreeJS**.
- Designed solutions for 50+ unique issues, including visual and gameplay fixes, revamping raycast systems, as well as optimizing performance to cut down memory usage and load times by 40%.
- Created a built-in **interactive tutorial** for the game, implementing **15+** in-game demonstrations and using **React** to design a **UI** considering player experience and aesthetics.
- Worked on the AI agent for a final boss, designing a cohesive moveset and implementing 30+ state animations.
- Built several minigames in Pygame to train reinforcement learning models using OpenAI Gym environments.
- Aggregated feedback from players and designed effective solutions to maintain gameplay balance and player satisfaction.

# Gameplay Programmer

Jan. 2023 – April 2023

Lucky VR

Toronto, ON

- Developed gameplay mechanics for the popular game PokerStars VR in Unity, for PC, Quest, and PSVR.
- Implemented scalable functionality in C# for 50+ new props and apparel for the VR environment.
- Fixed critical bugs and made significant QOL improvements for 70+ issues, ranging from collision and physics interactions, backend integration, texturing, and networking using Photon PUN RPC calls.
- Worked on implementing audio SFX and ambient noise using WWise integration.
- Revamped several weapon systems and VR avatar interactions to improve performance and eliminate latency by 60%.

#### Autonomous Vehicle Android Developer

May 2022 - Aug. 2022

Ford Motor Company of Canada

Oakville, ON

- Developed an Android application using Kotlin to send and receive CAN and SOA messages through the VHAL to set 60+ fundamental automobile property functions.
- Implemented an audio service for the infotainment system in Java using Android Open Source Project Automotive and Google TTS service, with the ability to play 40+ different prompts in 3 languages.
- Created 50+ unit tests with Mockito and Robolectric frameworks, resolving 70+ application bugs and issues.
- Wrote **20**+ UI tests using the **Facebook Litho** framework to test sub-component structures in the DXP FAQ app.

## **Projects**

#### Creature Clash | Unity, C#, Photon PUN

- Developed a physics-based mobile game using **Unity** engine and exported to **Android** to publish to the Play Store.
- Used **Photon PUN** framework to create an online multiplayer lobby, with an **RPC** model.

# MeetKicker | JavaScript, HTML, CSS

- Developed and published an extension to the **Chrome Web Store** that allows the user to kick themselves from a **Google Meet** once the members go below a customizable threshold, reaching **250+ active users** at its peak.
- Utilized CSS to design the extension panel and Chrome API to store user preferences in browser storage.