

Professional Summary

I am a passionate Video Game Developer. I enjoy teaching and communicating with other people so I made Youtube [Channel](#) to teach Unity VR and 3D and a [Discord](#) to help debug their code.

I am interested in solving algorithmic, physics-based or Mathematical challenges, such as :

- Predicting the intercept of 2 moving objects or trajectory physics simulation
- Procedural animations , procedural 3D maps
- AI for task solving, such as behavior trees ,A*, genetic algorithm

Languages

C# .Net

Python

C++

Java

Javascript

OpenGL

SQL

JSON

C

HTML

CSS

Softwares

Unity 5 VR,3D,2D

Unreal Engine 5

Visual Studios , note ++

Eclipse

Blender, 3D max

AutoCAD

ProjectManagment

Jira

Clickup

Github

Bitbucket

Education

ISI, L'institut Supérieur d'Informatique - Montreal ,Quebec :

Video Game Programming,

2 years 2020-2022

Azad University - tehran ,Iran :

Mechanical Engineering,

4 years 2015-2019

Working Experience

VR (Unity) Game Developer :

Contract - Present

Visualhawk Solutions Inc in Toronto - Canada

Unity tutorials in YouTube & Discord :

2022 - Present

[YouTube Channel](#), [Discord](#) Teaching Unity VR, 3D, C# & AI

Mechanical Engineer & 3D Designer :

Naghsheh Mehrzad Consultant engineers Tehran - Iran

2017 - 2019

Technical Skills

Below is a collection of keywords which represents my programming knowledge set gained through academia, personal projects, game jams, and learning for my [YouTube Channel](#) .

Unity 5 VR :

([Grappling Gun](#)) ([Thor Hammer](#)) ([Nunchaku](#))

Toolkit, XR plugin management, Android Optimization, Android Build, new input System, Oculus Setup and setup Controllers (any type)

Unreal Engine 5:

Blueprints, Material, CubeGrid, Lights, Lumen's global illuminations, Reflections, Fluid Simulations

Unity 3D,2D:

([GitHub](#))

Physics, Animations, Sound, Cinemachine, Particle System, Render Optimizations, Nav Mesh, Materials & Lighting, JSON Tilemap, Scriptable Objects, HDRP, UI, Editor Variables/Menus

AI :

([Flocking Monster AI](#))

Genetic, A*, Behavior tree, Depth & Breadth first search(BDS,DFS)

Procedural Generation :

([Procedural Map](#))

Procedural animations, Procedural map, Perlin noise

Architectures :

([Final Project in College](#))

Top-Down based(Manager), Component based, Event based, Coroutine based.

Design patterns :

([Final Project in College](#))

Factory Pattern, Object Pools,OCP Modular architecture, Singletons, State Machines, Manager Pattern, Command pattern, ECS, Observer pattern,Batching

Editor Scripting :

([Make tool to create Card](#))

Editor window Unity, Making several tools for other developers

Blender :

([Tutorial](#))

3D modeling, Character Face & Animation, Map Level designing, 3D Tile

Collections

Hashset/Dictionaries, ArrayLists, LinkedList, Trees, Stacks, Queues, Enumerables, collections

Management

([GitHub](#))

Agile,Unit Test, XP programming, Agile Scrum, Click up, Jira, Spring meeting, Project documentations (GDD), StoryBoard, GitHub

Debug/Optimizations

Computational complexity O(n), Breakpoints, Enforcing defensive coding techniques, Light baking, Batching