

# Sepehr Razmyar

UNITY GAME PROGRAMMER

Tehran, Iran

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## Summary

Unity programmer. BS in Computer Engineering in progress. Skilled in Unity & C#. Strong knowledge on design patterns, principles & best practices. I'm interested in Game AI, therefore I took some graduate Reinforcement Learning courses. For more projects please visit my [itch.io](#) or [portfolio](#).

## Skills

<b>Programming</b>	C#, Python, C++, C, Bash scripting, <b>Writing clean, reuseable &amp; readable code</b>
<b>Parallel Programming</b>	Compute Shaders, CUDA, OpenMP, Intel SIMD
<b>Testing</b>	Unit testing, Mocking
<b>Networking</b>	REST API, Photon, Encryption, Network protocols, Wireshark
<b>Artificial Intelligence</b>	Reinforcement Learning, Neural Networks, Deep Learning & Unity ML Agents
<b>Tools</b>	Git, Version control
<b>Mathematics</b>	University level math, 3D mathematics
<b>Problem Solving</b>	Algorithms, Data structures, Bit masking
<b>Microcontrollers</b>	Experience with embedded systems design using the Arduino programming environment

## Work Experience

### Pars Cog, University of Tehran

Tehran, Iran

LEAD PROGRAMMER, UNITY GAME DEVELOPER

Jul. 2021 - Feb. 2022

- Performed as Software Architect & Unity Developer developing & architecting game components
- Developed 2D & 3D Corsi Block for visual/auditory memory improvement** of children & elders
- Led a junior programmer** to develop a Dementia assessment game

### Amytis Games

Tehran, Iran

UNITY GAME DEVELOPER INTERN

Jul. 2019 - Sep. 2019

- Programmed an configurable 2D enemy AI with animations
- Improved their path system from waypoint based to Bezier spline by implementing an editor tool which you can edit the spline in scene view
- Programmed a matchmaking system using Photon Networking**
- Programmed camera control for a mobile game

## Projects

### Super Crash UFOs (72h Game Jam) Remote USA, England, Iran

LEAD PROGRAMMER

Oct. 2021

- Programmed UFO's movement, abduction, dropping...
- Designed UFO's power up base architecture
- Programmed power ups such as Black Hole, Shield &, Boost
- Implemented local multiplayer logic** using Unity's New Input System
- Used math to create smooth abduction animation
- Responsible for the Portal (drop zone) & its shader & particles

### S.P.H.E.R.E



Tehran, Iran

SOLO UNITY DEVELOPER

Jun. 2021

- Based on Trials Evolution's mini game, this game was developed to represent our Xbox Remote Controller
- Programmed ball's movement & behavior
- Programmed custom occlusion to segment levels into zones for optimization
- Programmed dynamic obstacles & steams

### Prince of Persia's rewind mechanic



Tehran, Iran

SOLO UNITY DEVELOPER

Jul. 2019

- A 3rd person game which you can rewind time like Prince of Persia
- Programmed rewinding time mechanic & visuals effects
- Programmed character movement
- Used Blend Trees for movement animations

### A Man Looking for His Organs

Tehran, Iran

SOLO UNITY DEVELOPER

Feb. 2020

- 2D platformer game developed in 48 hours for Global Game Jam 2020, with theme of "Repair"
- The player has to fight enemies, gather his organs & shoot his way out
- Programmed player & AI behavior
- Used Object Pooling for bullets to optimize the game

### Haft Peykar's Turquoise Dome

SOLO UNITY DEVELOPER

- Responsible for shaders, particles, level design & scripts

[Tehran, Iran](#)

Jul. 2021

### Pacman using A\* algorithm

SOLO UNITY DEVELOPER

- Pacman game where each ghost has different strategy
- Programmed ghosts to use A\* for pathfinding

[Qazvin, Iran](#)

Jul. 2019

### Xbox Remote Controller

SERVER SIDE & ANDROID PROGRAMMER

- Your Android device can act as an Xbox controller
- Support multiplayer, up to 4 players**, useful for when you're short on controllers
- Support multiple layouts for different games, e.g., gyroscope layout for driving games
- Supports Unity games & every game that supports Xbox controller

[Tehran, Iran](#)

Jun. 2021

### Nerf Gun as a VR Gun Controller

SOLO PROGRAMMER

- Turned a Nerf gun to a gun controller for PC, Xbox, PS4 games which acts as a mouse & keyboard using Arduino
- Pull the trigger in real life, it'll shoot in game
- Reload in real life, it'll reload in game
- Use the buttons & thumb stick to walk, jump, interact etc.
- Works on every FPS game
- Melee in real life, it'll melee in game, check the video for more details

[Tehran, Iran](#)

Jul. 2021

### Tank Trouble using PyGame

SOLO PROGRAMMER & ARTIST

- 2D game developed using PyGame(Python)
- Supports **local multiplayer** & supports Xbox & PS4 controllers
- Implemented horde (survival) mode with waypoint based AIs
- Implemented shotgun, big ball & shield power up

[Tehran, Iran](#)

Jan. 2018

### Ballz clone using SDL

SOLO PROGRAMMER & ARTIST

- 2D game developed using C++ & SDL for Advanced Programming course
- Added explosion, bricks cracking & creating dust and magnet pulling animation for balls to unify

[Tehran, Iran](#)

Apr. 2018

## Education

### University of Tehran

BACHELOR OF COMPUTER ENGINEERING

- Studying at Electrical Computer Engineering Faculty of University of Tehran
- Overall GPA: **3.86 / 4 (18.61 / 20)**
- Thesis project: Developing cognitive games for visual/auditory memory improvement of children & elders** - Supervisor: Prof. Hadi(Manouchehr) Moradi

[Tehran, Iran](#)

Sep. 2017 - Jun. 2022

## Certifications

2022 **Reinforcement Learning Specialization** 

[Coursera](#)

2022 **Structuring Machine Learning Projects** 

[Coursera](#)

2021 **Core Interaction Programming part of Unity Certified Programmer Exam Preparation Specialization** 

[Coursera](#)

2021 **Neural Networks and Deep Learning** 

[Coursera](#)

2021 **Improving Deep Neural Networks: Hyperparameter Tuning, Regularization and Optimization** 

[Coursera](#)

## Honors & Awards

2022 **Finalist**, for the Best Undergraduate Project Award 

[University of Tehran](#)

2022 **Ranked 11th**, out of approximately 105 undergraduate students in Computer Engineering

[University of Tehran](#)

2017 **Ranked 810th**, out of more than 146000 participants in Nationwide Universities Entrance Exam (B.Sc.)

[Mashhad, Iran](#)

## Soft Skills

Hard working

Team working

Continuous learning

Commitment

Responsible

Time management

## Languages

**English** Professional working proficiency

**Persian** Native or bilingual proficiency

## Portfolio

[Online portfolio](#) with additional details about the projects and my works are available online