









I am a game programmer with over six years of experience using C# and Unity, developing engaging gameplay features. I pride myself on my expertise in software design principles and my ability to write clean, extendable, and maintainable code.

I enjoy the challenge of programming and creating immersive game worlds that capture the player's imagination. To me, anything that can evoke emotions is a form of art, and I am dedicated to crafting games that offer unique and memorable experiences for players.

## WORK EXPERIENCE

Feb 2023-Aug 2023	<b>Technical Leader</b> GOLMORAD/DREAM HOME: MANSION MAKEOVER · Medrick Game Studio ( <a href="#">Website</a> ), Tehran  Golmorad ( <a href="#">Golmorad GooglePlay</a> , <a href="#">Dream Home GooglePlay</a> ) is a popular match-3 game with a deep storyline and multiple mini-games, published on local and international stores played by over 10 million users in total. <ul style="list-style-type: none"> <li>Set goals, ensured smooth functioning and efficient performance of technical operations, designed architecture, and programmed gameplay that resulted in more than 1M downloads and a rating of 4.5 stars by 80.9K reviews on Google Play. This exposure deepened my proficiency in following software design principles, guaranteeing the creation of code that is clean, scalable, and easy to maintain.</li> <li>Monitored and evaluated staff progress</li> <li>Recruited, interviewed, assisted, and trained new technical employees</li> </ul>	
Aug 2020-Aug 2023	<b>Senior Game Developer</b> GOLMORAD/DREAM HOME: MANSION MAKEOVER · Medrick Game Studio, Tehran  <ul style="list-style-type: none"> <li>Designed, developed and optimized features for the Match3 Games. This included the development of interactive elements, gameplay mechanics, and user interfaces, fostering a dynamic and captivating gameplay environment.</li> </ul>	
Summer 2021	<b>Data Scientist</b> GAHVAREFAMILY · Gahvare ( <a href="#">Website</a> ), Tehran  <ul style="list-style-type: none"> <li>Gained hands-on experience building scalable pipelines.</li> <li>Learned about agile development methodologies and version control with Git, and worked collaboratively with other developers on a team.</li> <li>Developed teamwork skills and gained insight into project management methodologies like Scrum.</li> </ul>	
Summer 2020	<b>Data Scientist</b> COMPUTER VISION TEAM · Avir AI ( <a href="#">Website</a> ), Tehran  <ul style="list-style-type: none"> <li>Conducted research on pattern recognition, convolutional neural networks, and computer vision as well as image conversion methods such as cycleGAN and pix2pix</li> </ul>	

## SKILLS

Programming Languages: C# C++ Python Latex


Programming Skills: Game Design Patterns MVC, MVP, ECS Clean Code S.O.L.I.D Principles

Game Engines: Unity Unreal Engine

Graphics: Blender Photoshop Aseprite Adobe After Effects Krita

Languages: English: Native Persian: Native Arabic: Beginner

## EDUCATION

Now **Master of Science**  
COMPUTER SCIENCE · University of Alberta 



2022 **Bachelor of Engineering**  
COMPUTER ENGINEERING · University of Tehran 



## PROJECTS

[Udemy Course](#)

present	<b>Unreal Engine C++ The Ultimate Game Developer Course</b> <ul style="list-style-type: none"><li>• Spearheaded the development of a comprehensive RPG action game featuring a third-person character.</li><li>• Successfully implemented an intricate combat system, incorporating swords and various melee weapons for a dynamic gaming experience. Engineered and integrated health bars and player stat functionalities, enhancing user engagement and gameplay depth.</li><li>• Designed and created diverse game levels, incorporating realistic scenes utilizing Quixel Megascans for visually immersive gameplay.</li><li>• Applied particle effects, including realistic blood splatter and weapon trails, contributing to the game's visual appeal.</li><li>• Designed and implemented AI-driven enemies, enriching gameplay with challenging adversaries that actively engage the player.</li><li>• Integrated Motion Warping, leveraging Unreal Engine 5's cutting-edge system for customized root motion animations, enhancing character movement and animation realism.</li><li>• Utilized Unreal Engine 5's innovative MetaSounds system to implement high-quality and immersive audio experiences, elevating the overall sound design within the game.</li></ul>
2022	<b>Graph Shaders</b> <ul style="list-style-type: none"><li>• Showed mathematical functions using graphs</li><li>• Animated the graphs</li></ul>
2021-2022	<b>Zombie Apocalypse Survival D</b> <ul style="list-style-type: none"><li>• Utilized navigation and pathfinding in Unity</li><li>• Used animation and state machines</li><li>• Implemented an AI system</li></ul>
2019	<b>Galaxy Shooter Arcade Game D</b> <ul style="list-style-type: none"><li>• Implemented collision detection, user input handling, and player movement.</li><li>• Designed and programmed power-ups, including triple shots, laser beams, speed boosts, and shields.</li><li>• Developed enemies with basic AI behavior for challenging gameplay.</li><li>• Applied shaders, integrated sound effects, background music, and particle effects.</li></ul>
2019	<b>Sci-Fi Demo D</b> <ul style="list-style-type: none"><li>• Implemented first person shooter</li><li>• Used Navigation System and Mesh</li><li>• Learned about Destructables</li></ul>

[Github](#)

## NOTABLE ACADEMIC COURSEWORK PROJECTS

Artificial Intelligence	<b>Design and Implementation of Neural Networks</b> <ul style="list-style-type: none"><li>• Utilized Pytorch to build a custom neural network from scratch for an image classifier.</li><li>• Trained and tested the model on datasets.</li><li>• Performed hyper-parameter tuning.</li></ul>
Artificial Intelligence	<b>Decrypt Encoded Text with Genetic Algorithm &amp; NLP</b> <ul style="list-style-type: none"><li>• Discovered the key to substitution cipher and finding parameter values such as mutation rate, pool size, etc. through experimentation with help of NLTK.</li></ul>
Artificial Intelligence	<b>Design and Implementation of Search Algorithms</b> <ul style="list-style-type: none"><li>• Solved a problem of finding patients and transferring them to hospitals on a map.</li><li>• Used uninformed and informed search algorithms, such as Breadth-First Search, Iterative Deepening Search and A* search.</li></ul>
Artificial Intelligence	<b>Design and Implementation Minimax and Alpha-Beta Pruning</b> <ul style="list-style-type: none"><li>• A game defined as a search problem, discovering an appropriate solution to the two-player Pacman game finding food and poisons on a certain map.</li></ul>
Advanced Programming	<b>Implementation of the Ballz game (Logic and Graphics)</b> <ul style="list-style-type: none"><li>• Developed the Ballz game, incorporating advanced logic and graphics to create an engaging and dynamic gaming experience.</li></ul>
Advanced Programming	<b>Implementation of the Pacman game</b> <ul style="list-style-type: none"><li>• Implemented the iconic Pacman game, showcasing proficiency in advanced programming concepts.</li></ul>

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