

# Roa Khaldoon

## Game Programmer

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GitHub: [github.com/RoaK95](https://github.com/RoaK95) | Portfolio: [roaakhaldoon.net](https://roaakhaldoon.net)

### Summary

A game Programmer with over 4 years of experience specializing in Unity and C#. Passionate about AI programming, gameplay mechanics, and optimization. Seeking a game programmer role where I can leverage my expertise in AI programming and gameplay mechanics to contribute to innovative projects and enhance player experiences.

### Technical Skills

- **Game Engines:** Unity Engine, Godot.
- **Programming Languages:** C#, JavaScript, Python, C++.
- **Version Control:** Git, GitHub.
- **Optimization and Performance:** Game optimization, performance tuning, memory management.
- **AI and Machine Learning:** FSM, A\* pathfinding, steering behaviors, GOAP system, basic machine learning integration.
- **UI/UX Design:** UI design and player experience optimization in Unity.
- **Testing and Debugging:** Bug fixing, debugging tools, automated testing.
- **Game Programming:** Game mechanics, gameplay systems, game physics.

### Projects

- **Animal Farm**

Developed a farm simulation in Unity and C# using AI steering behaviors model to imitate realistic animal movement patterns. [\[Link\]](#)

- **Dragon's Pit**

Designed and programmed a playable simulation with Unity and C# using finite-state-machine model (FSM) to control the dragon's animations and behavior. [\[Link\]](#)

- **Published Game: Spooky Things**

Designed, developed, tested, and released a hyper-casual game on Itch.io. Implemented intuitive controls, optimized performance, and enhanced user experience. [\[Link\]](#)

- **Unity Developer Community Jam (UDC Jam #25)**

Collaborated in a team of three to design and develop a 2D puzzle game within nine days. Programmed core mechanics and successfully published the game on Itch.io. [\[Link\]](#)

### Professional Experience

#### Software Engineer

Ministry of Industry and Minerals Formations (Nov 2020 –April 2024)

- Optimized database systems, reducing query response time and improving performance.
- Troubleshoot and resolved system issues, ensuring uninterrupted operations.
- Collaborated cross-functionally to implement updates, improving system stability.

### Education

Bachelor of Science (BSc) in Software Engineering. University of Al-Iraqi, Baghdad, Iraq (2018).