# THOMAS KOCH

## SENIOR UNITY ENGINEER

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## **OVERVIEW**

I am a skilled and passionate game developer with over 10 years of experience specializing in Unity 3D. I excel in designing innovative gameplay mechanics, building scalable systems, and optimizing performance across mobile, PC, and console platforms. With expertise in C#, Al-driven systems, and multiplayer features, I bring a collaborative approach to creating immersive and engaging gaming experiences.

## **EDUCATION**

## BACHELOR'S DEGREE | COMPUTER SCIENCE

Rochester Institute of Technology Apr 2010– Jul 2014

Relevant coursework: Programming fundamentals, software design, computer graphics programming, game development, and data structures.

## **SKILLS**

Programming Languages: C#, C++, JavaScript, Dart, Lua

**Game Engines & Frameworks:** Unity 3D, Cocos2D, Unreal Engine (basic) **Al Development:** Unity NavMesh, Behavior Trees, Adaptive Al systems

AR/VR Development: ARKit, Oculus Rift, SteamVR, VFX Graph

Multiplayer Systems: Photon Unity Networking, Firebase Realtime Database

**Database Management:** MySQL, PostgreSQL, Firebase, SQLite **Graphics & Animation Tools:** Blender, Substance Painter, Photoshop **Blockchain Integration:** Smart contracts, Play-to-Earn (P2E) mechanics

**Performance Optimization:** Physics tuning, asset optimization, multi-platform support **Development Practices:** Modular architecture, reusable components, scalable system design **Soft Skills:** Team collaboration, project management, problem-solving, creative thinking

## **EXPERIENCE**

## **INFINITY-UP | SENIOR UNITY ENGINEER**

Dover, DE, May 2020 - present

- Designed and implemented complex gameplay mechanics and systems for mobile and crossplatform games.
- Optimized game performance through resource management, physics tuning, and asset optimization to support diverse platforms.
- Developed Al behaviors and adaptive systems to enhance gameplay experience and maintain player engagement.
- Collaborated with cross-functional teams to deliver high-quality games with smooth and responsive gameplay.

#### THE NINEHERTZ | SENIOR UNITY DEVELOPER

Cincinnati, OH, Jun 2018 - May 2020

- Created modular and scalable game architectures to support multiplayer and single-player modes.
- Designed and implemented core gameplay features, including combat mechanics, environment interactions, and character systems.
- Enhanced team productivity by developing reusable components and tools for rapid prototyping.
- Contributed to improving user experiences through UI/UX optimizations and dynamic in-game systems.

### **ROONYX | UNITY DEVELOPER**

New York, NY, Mar 2017 - Jun 2018

- Developed AI systems and pathfinding algorithms for interactive and immersive environments.
- Streamlined development workflows by introducing optimized asset management and procedural generation techniques.
- Designed intuitive player controls and systems for a variety of game genres, focusing on accessibility and engagement.

#### **KAPPS | UNITY DEVELOPER**

New York, NY, Sep 2014 - Mar 2017

- Built foundational game systems and mechanics for mobile and desktop platforms.
- Implemented physics-based interactions and real-time multiplayer features for competitive and cooperative gameplay.
- Optimized game engines for performance, reducing load times and improving frame rates on mobile devices.