Berke Kaya

+90 530 179 2201 | berke@berkekaya.dev | Ankara, TURKEY
berkekaya.dev | github.com/berkekayasg | linkedin.com/in/berke-kaya-a83586362

SUMMARY

Highly motivated and resourceful Unity & C# Developer with 5 years of diverse coding experience, including 2 years dedicated to game development. Specializing in creating polished game experiences with a proactive problem-solving approach and high adaptability. Strong skills in Unity Gaming Services, game client security, and performance optimization. Proven ability to rapidly master new technologies and apply them effectively.

PROJECTS

- **BattlEdge (Android) | YouTube | Google Play**
  Secure, UGS-powered 3v3 online MOBA for Android with robust multiplayer architecture.
  - Engineered secure, server-authoritative gameplay for a competitive mobile MOBA.
  - Leveraged Unity Gaming Services extensively (Multiplayer, Cloud Code, LiveOps, Monetization).
  - Implemented core MOBA features: customizable skills, matchmaking, leaderboards, social systems.
  - **Technologies:** Unity, C#, Unity Gaming Services, Google Services.

- **Fluid Simulation with Compute Shaders (PC) | YouTube | (Based on SebLague's Fluid-Sim)**
  GPU-accelerated fluid dynamics project exploring Compute Shaders for interactive simulations.
  - Developed custom Compute Shader kernels for dynamic, interactive fluid particle systems.
  - Engineered bidirectional CPU-GPU data exchange for realistic object-fluid interactions.
  - Gained hands-on experience in GPU programming (HLSL) and CPU-GPU optimization techniques.
  - **Technologies:** Unity, C#, Compute Shaders, HLSL.

- **Runtime Mesh Fragmentation (PC) | YouTube | GitHub**
  High-performance system for runtime mesh fragmentation, optimized with Job System & Burst.
  - Implemented high-performance runtime mesh fragmentation using iterative plane slicing.
  - Maximized performance with Unity's Job System & Burst Compiler for parallel processing.
  - Utilized Mesh.MeshData API for direct memory management and optimized mesh data handling.
  - **Technologies:** Unity, C#, Job System, Burst Compiler, Mesh.MeshData API.

For more details on these projects and to explore others, please visit my portfolio website: berkekaya.dev

SKILLS

Engine & Languages: Unity, C#, Python

Platforms: Android, PC

Core Dev: Gameplay Architecture & Systems Design, UI, Performance Analysis & Optimization, Shader, Git

Unity Gaming Services (UGS):

- **LiveOps:** Cloud Save, Remote Config, Analytics, Leaderboards, Diagnostics
- **Multiplayer:** Netcode for GameObjects, Lobby, Hosting, Matchmaking
- **Monetization/Economy:** Ads, IAP
- **Backend:** Cloud Code
- **Player Services:** Authentication, Management, Friends, Vivox Text Chat

Platform SDKs: Google Services (AdMob, IAP, Play Services, Firebase), Steamworks (Facepunch)

Technical Focus: Game Client Security Awareness, AI for Development Acceleration

Currently Learning: DOTS, Advanced Compute Shaders & GPU Techniques