

# KHIZER KHALID

## Senior Unity Engineer · Gameplay & 3D Applications

Berlin, Germany · +49 176 7551 2343 · khizer.khalid1@gmail.com

Portfolio [khizerkhalid.com](https://khizerkhalid.com) LinkedIn [linkedin.com/in/khizer-khalid-849b7886](https://linkedin.com/in/khizer-khalid-849b7886) GitHub [github.com/mkhizer77](https://github.com/mkhizer77)

### SUMMARY

Unity / C# gameplay engineer, 10 years, Berlin. Shipped 5+ 3D titles and a 50M+ download mobile hit, then spent five years owning architecture, performance and releases of a live 3D app. Covers the whole 3D loop: animation, cameras, NavMesh and behaviour-tree AI, data-driven systems, UI, plus the art pipeline and editor tooling that keep artists and designers moving. No relocation needed.

### SKILLS

|                                 |                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Game Development</b>         | Unity 2D/3D, C#, HLSL; Three.js, React Three Fiber, WebGL; Phaser; character controllers, physics; Animator state machines, blend trees, IK, humanoid retargeting; Cinemachine and custom camera rigs; behaviour trees, state machines, NavMesh, NPC / vehicle / traffic AI; economy and upgrade-tree systems; data-driven content (ScriptableObjects, dialogue and cutscene data)                           |
| <b>3D Applications</b>          | Soulside: scene composition from built-in assets and user uploads; runtime world-building tools (handles, snapping, undo/redo); branded worlds with shop-linked product placements; social layer with relationship-based privacy; IAP storefront with wallet and NFT integrations; procedural music and media pipelines. Decorist / BBBY: Room Builder (Unity + 3ds Max), 3D nursery configurator (Three.js) |
| <b>XR</b>                       | Meta Quest VR versions of the Soulside worlds (interaction, camera, avatar presence, input profiles, performance budgets); Gear VR shooter prototype; Unity Input System (touch, desktop, VR)                                                                                                                                                                                                                |
| <b>Multiplayer</b>              | Photon; networked ReadyPlayerMe avatars with synced animation, voice lip-sync and LOD for 200 concurrent avatars; voice and text chat; Agora video calling                                                                                                                                                                                                                                                   |
| <b>Backend</b>                  | Firebase (Firestore, Functions, Auth), multi-tier caching; REST and custom APIs; Clean Architecture, Domain-Driven Design, event-driven patterns                                                                                                                                                                                                                                                             |
| <b>Tooling &amp; Automation</b> | Unity Editor extensions (UI Toolkit, custom inspectors), designer tools; 3ds Max to Unity pipeline automation (MAXScript); Blender, 3ds Max; asset import setup; native iOS / Android plugins (ads, analytics, notifications, media); Addressables, Asset Bundles, LODs; CI/CD (Unity Cloud Build, Jenkins, Fastlane); Git (GitFlow); Jira, Scrum                                                            |
| <b>UI &amp; Localization</b>    | uGUI, UI Toolkit, Figma to Unity handoff, responsive multi-resolution layouts, I2 Localization (EN / DE)                                                                                                                                                                                                                                                                                                     |
| <b>Performance</b>              | Unity Profiler, Memory Profiler, Frame Debugger; CPU, GPU and memory budgeting; build-size reduction; mobile and VR optimisation within fixed hardware budgets                                                                                                                                                                                                                                               |

### EXPERIENCE

**Self-employed** · Berlin, Germany

May 2026 – Present

*Independent Unity & 3D Developer*

- Launched khizerkhalid.com, an interactive 3D portfolio that holds 60 FPS on mobile and desktop, by building a scroll-driven scene in React Three Fiber with staged asset loading
- Prototyping a Unity gameplay project and a Meta Quest app for public release

**Soulside GmbH** · Berlin, Germany

Nov 2020 – Apr 2026

*Senior Unity Engineer*

- Held 60 FPS on mid-range devices with near-zero crashes across a five-year live 3D app, by architecting the core on Clean Architecture over Firebase and profiling CPU, GPU and memory throughout development, not at the end
- Let users compose 3D scenes from built-in assets and their own media and 3D objects, by building the creation modes and scene-composition core on data-driven assets streamed via Addressables
- Cut world-building effort with a runtime toolset: move / rotate / scale handles, wall snapping, orbit / pan / pinch camera and command-pattern undo/redo
- Rendered 200 animated avatars concurrently in one multiplayer instance, by building the networked avatar system: runtime ReadyPlayerMe characters, Animator state sync across devices, voice-driven lip-sync and a tokenised LOD system
- Shipped branded 3D worlds with shop-linked product placements, voice and text multiplayer and Meta Quest VR versions on one avatar and input framework
- Halved build size and ended manual deployments: asset audits, compression tuning, Addressables on-demand delivery, Unity Cloud Build and Fastlane releases

- Kept the art-to-Unity pipeline stable in production and shipped UI to spec: owned import and setup of external 3D assets; built uGUI from Figma for phone and tablet with EN / DE localisation
- Led a cross-functional team (2 Unity, 1 backend, external artists and QA) that shipped the social layer, IAP storefront and media pipelines

**Tintash** · Lahore, Pakistan

Apr 2018 – Nov 2020

*Senior Software Engineer*

- Shipped Room Builder into Bed Bath & Beyond US stores, by automating a Unity to 3ds Max round-trip (2D wireframe to runtime 3D, MAXScript scene rebuild, photoreal renders back into Unity) and sitting with 3D artists daily to fix issues on both sides
- Topped the iOS and Android charts with Nail Salon 3D, 50M+ downloads, by engineering its core mechanics and build automation for publisher Lion Studios
- Delivered a shoppable 3D nursery design tool for buybuy BABY, by leading the Three.js / WebGL build and a pre-render pipeline compositing 100k+ product combinations
- Made Gulp.io, a 3D eat-and-grow game, feel like live multiplayer with 12–16 opponents, by building behaviour-tree AI agents with size-based targeting, pursuit and avoidance, tuned for low-end phones
- Delivered gameplay for AA clients (Beat Bugs, STICK Sports, SimCell): cross-platform loops, state-machine NPC behaviour, rigid-body character controllers and native plugins, plus custom Editor tooling that removed asset-integration bottlenecks for artists and designers
- Reached the Casual Connect USA 2019 finals with Novi (designer level-generation tooling, goal-oriented hint search over 100k+ states); served as Scrum Master and set code-review standards

**Mindravel Interactive** · Lahore, Pakistan

Oct 2017 – Mar 2018

*Software Engineer (Unity)*

- Shipped two merge titles (Merge Factories, Merge Fish) on iOS and Android from one engine built from scratch, by implementing rule-driven grid merging, an upgrade tree and data-driven economy models balanced with designers
- Extended Zayed The Leader, the #1-ranked 3D city-building simulation in the UAE, by building new mini-games and live-ops content and owning store releases and updates
- Cut setup time on new projects with reusable packages: humanoid NPC AI, NavMesh waypoint agents, UI manager, localisation, and a spreadsheet-to-ScriptableObject dialogue and cutscene system

**OZI Technology** · Lahore, Pakistan

Oct 2015 – Sep 2017

*Game Developer (Unity)*

- Shipped 5+ commercial 3D vehicle-simulation and FPS titles on mobile within fixed hardware budgets, by writing custom HLSL shaders, lighting and material setups and profiling on low-end devices
- Brought characters to life with Animator state machines, blend trees, IK and humanoid retargeting, and built fighting, cover-shooter and physics-based character controllers
- Populated worlds with NavMesh-driven multi-agent behaviour (vehicle navigation, urban traffic, defensive NPC decision-making) through reusable state-machine AI, and designed the in-game stores and economies

## SELECTED PROJECTS

- **Soulside** iOS / Android · 3D social app: branded worlds, avatars, multiplayer, VR
- **Nail Salon 3D** Lion Studios, iOS / Android · 50M+ downloads · core mechanics and build automation
- **Zayed The Leader** iOS / Android · #1-ranked UAE 3D city-building simulation · mini-games, live-ops
- **Merge Factories** iOS / Android · merge-economy engine; also shipped as Merge Fish
- **Room Builder** Decorist / BBBY, Windows / macOS / WebGL · Unity + 3ds Max render pipeline used in Bed Bath & Beyond US stores · [demo video](#)
- **Gulp.io** 3D eat-and-grow game, behaviour-tree AI opponents simulating multiplayer · [gameplay video](#)
- **Nursery Design Platform** BBBY, web · Three.js / WebGL e-commerce visualisation
- **Novi – Visual IQ Puzzles** iOS / Android · Casual Connect USA 2019 finalist · goal-oriented hint search

More projects: [khizerkhalid.com](http://khizerkhalid.com)

## EDUCATION & LANGUAGES

BSc Computer Science · University of Central Punjab · 2011 – 2015 · **English** fluent · **German** A2