

Moses Kamau Mbugua

QA Engineer · PC & VR · 8 Years Hands-On Testing, 10 Years Shipping Games as an Engineer
Nairobi, Kenya (UTC+3, full overlap with EET) · Remote
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SUMMARY

QA engineer with 8 years of hands-on game testing across PC, VR, iOS and Android, most of it embedded inside development teams. Underneath that are 10 years of shipping games as a Unity/C# and Unreal developer, including VR experiences, which lets me trace a bug to its cause instead of only describing the symptom. Reading a crash log, profiler trace or stack trace is routine for me. I own release-candidate validation end to end: functional, regression and exploratory passes, performance testing, backend and analytics verification, and go/no-go sign-off.

I have Meta Quest 2 and Quest 3 hardware, work with Steam Link and Horizon Link, am familiar with OpenXR and SteamVR, and have tested VR titles professionally. I have a solid understanding of PC gaming and FPS mechanics, and I break complex gameplay scenarios down into clear, repeatable test cases. I track and manage test work in Jira and TestRail.

EXPERIENCE

QA Tester — Good Gamer Group *Nairobi, Kenya | 2025 – Present*

- Primary role testing PC games and software.
- Tested VR titles and applications, and tested Meta's VR development tools (a custom engine for building VR titles).
- Hands-on with Meta Quest 2 and Quest 3 headsets, using Steam Link and Horizon Link for PC VR testing.

QA / Release Testing (embedded in development) — Funcell *Nairobi, Kenya | Oct 2024 – Nov 2025*

- Owned full release-candidate validation for Pawn to Don (Unity, Android; 1M+ downloads, 4.4★) before every Google Play submission: startup time, a 30fps floor, orientation, UI and settings, full gameplay play-throughs, analytics events and Addressables/DLC loading.
- Ran each validation pass across 3 devices from low-end to high-end (roughly 45 minutes to 1h 45m per pass). Sign-off bar: zero crashes, zero progression blockers, working analytics. Minor cosmetic issues were logged as known issues for the next build.
- Tracked bugs in Jira with severity and priority logged separately. Every report included repro steps, build number, platform and a save file or capture. Triaged with developers about twice a week and re-verified fixes against each new build before closing tickets.
- Built a library of save files at key story points so regression could jump straight to affected sections of a 30-day branching narrative instead of replaying full playthroughs.
- Investigated a non-crashing soft-lock with no exception, ANR or logged error. Used the game's analytics event stream as a breadcrumb trail to find where progression stalled, then correlated it with the Unity Profiler and an in-build FPS overlay to find a frame spike dropping animation events that progression depended on. Flagged that fixing the animation removed the trigger but not the underlying fragility: progression had no failsafe for a missed event.
- Ran battery and network testing on Android using dumpsys, Battery Historian and Charles Proxy (degraded connections, dropped connectivity, reconnection).
- Built a CI/CD pipeline with GitHub Actions (GameCI) for multi-platform builds and automated unit/integration tests covering core game logic, inventory systems and network payload serialization.

Founder & Studio Lead (QA & Release Testing) — Mesmerize Studio *Nairobi, Kenya | 2016 – Present*

- Ran pre-release testing on the studio's mobile titles before Google Play and App Store submission, and reviewed other developers' builds before release.
- Owned iOS and Android store submission end to end, including production test tracks and rollout sign-off.
- Profiled iOS battery use with Xcode Instruments (Energy Log) and integrated and debugged third-party SDKs in Unity projects.

Lead Developer (QA across a live portfolio) — Usiku Games *Nairobi, Kenya | 2020 – 2021*

- Ran continuous testing across a portfolio of live HTML5 games and reported issues back to the teams.
- Rebalanced live titles (difficulty, pacing, progression) using PlayFab and Firebase analytics, funnel analysis and retention tracking.

Game Developer (QA) — Internet of Elephants *Nairobi, Kenya | 2018 – 2019*

- Playtested features and full builds before rollout on AR experiences, and built Unity editor tooling for the content team.

Interactive Experience Designer — Bean Interactive *Nairobi, Kenya | 2016 – 2017*

- Designed and programmed mobile games and VR/AR experiences for physical brand activations.

QA TOOLS & PROCESS

- **Test documentation:** structured release-candidate checklists (device/platform, UI and settings, gameplay, technical) run as a repeatable pass, with full retest after any failed build.
- **Bug tracking & test management:** Jira (severity and priority tracked separately), TestRail, plus an in-house engine-integrated tracker on one project.
- **Debugging & investigation:** Android logcat, Unity Profiler (draw calls, CPU frame time, memory), in-build FPS overlays, and correlating profiler data against reproducible triggers to isolate root cause.
- **VR:** Meta Quest 2 and Quest 3; Steam Link and Horizon Link; familiar with OpenXR and SteamVR; tested VR titles and Meta VR development tools; developed VR experiences in Unreal Engine (UE4) and Unity.
- **Engines:** Unity and C# (10 years); Unreal Engine, including working knowledge of UE5 (developed VR experiences and a game).
- **Gaming knowledge:** PC gaming and FPS mechanics, and decomposing complex gameplay scenarios into test cases.
- **Performance, battery & network:** Battery Historian, Xcode Instruments, Charles Proxy, load and startup time measurement across a device range.
- **Automation & CI/CD:** GitHub Actions + GameCI.
- **Backend & live ops:** PlayFab, Firebase, analytics verification from client to server, Addressables/DLC delivery checks.
- **Platforms:** PC, VR (Quest), iOS, Android.
- **Languages:** English (fluent, C1+, professional working language) · Swahili (native).

EDUCATION & TRAINING

Hyper-Casual Games Training Programme — Crazy Hubs, Cape Town, South Africa · 2021

Diploma, IT Systems and Support — Nairobi, Kenya · 2016