İlhan Bahadır Yavaş

Ankara, Türkiye | +90 553 543 6749 | ilhanbahadiryavas@gmail.com

A passionate and detail-oriented Unreal Engine Game Developer with hands-on experience in VR development, C++ programming, and interactive gameplay design. Skilled at building immersive environments, integrating 3D assets, and optimizing performance for real-time experiences. Currently pursuing a Bachelor's degree in Information Systems and Technologies at Bilkent University, combining a strong foundation in software engineering, database systems, and object-oriented programming with practical experience in Unreal Engine 5 and VR simulation projects. Experienced in collaborative development environments and adept at bridging creative design with technical implementation to deliver engaging and high-performance applications.

EDUCATION

İhsan Doğramacı Bilkent University — **Ankara**
İnformation Systems and Technologies — 2021-2026

WORK EXPERIENCE

INFINIA Engineering | Unreal Engine Game Developer | Full-Time | Ankara — Jan 2025 – May 2025

- Developed immersive VR and 3D interactive environments using Unreal Engine 5 and C++.
- Collaborated with the design team to integrate interactive mechanics, optimize performance, and refine user experience.
- Implemented gameplay logic, event triggers, and custom blueprint systems for advanced interactivity.

INFINIA Engineering | Unreal Engine Game Developer | Part-Time | Ankara — Sep 2024 – Jan 2025

- Focused on VR development, including object interaction systems and environment optimization.
- Designed interactive experiences compatible with multiple VR platforms.
- Worked closely with 3D artists and designers to implement visual storytelling within Unreal Engine.

INFINIA Engineering | Unreal Engine Game Developer Intern | Internship | Ankara — Jul 2024 – Aug 2024

- Assisted in developing gameplay systems, level blueprints, and interactive UI elements.
- Gained hands-on experience in game design, 3D modeling integration, and performance optimization.
- Learned best practices for collaboration in a production environment.

BTC Bilişim Hizmetleri | Intern Student | Internship | İstanbul — Jun 2024 - Jul 2024

- Worked on SQL-based data operations and SAP ERP systems.
- Contributed to database design and report generation.
- Assisted in improving internal workflows by leveraging ERP functionalities.

SKILLS

Unreal Engine 5, C++, VR Development, Game Design, 3D Modeling, Blueprint Scripting, Java, SQL, SAP ERP, Object-Oriented Programming, Web Design, Git, Oracle SQL Developer, C, Kali Linux, Performance Optimization, UI Interaction Systems, Level Design, Software Engineering, Database Management

LANGUAGES

English - Upper Intermediate

PROJECT

VR Showroom Project - Unreal Engine 5 (VR) - Infinia Engineering

- Built an interactive VR showroom where users can freely explore spaces, inspect assets, and trigger contextual interactions (UI prompts, tooltips, sound cues).
- Implemented interaction systems (overlap/trace, grab/inspect, highlight states) in Blueprint with clean component architecture for reuse.
- Tuned VR locomotion (teleport + snap turn), collision, and comfort settings; validated UX with quick playtests.
- Optimized for smooth VR performance: Lumen/TSR settings, Nanite usage, LODs, and visibility culling; profiled with stat unit, GPU/CPU visualizers.
- Tech: UE5, Blueprints, VR Template, Motion Controllers, Lumen, Nanite, Git

Zombie Survival Game - Unreal Engine 5 (Co-op Prototype)

- Prototyped a co-op survival loop: round pacing, resource pressure, health/damage feedback (screen shake, post-process, audio cues).
- Designed blockout levels emphasizing player flow, choke points, and sightlines; iterated encounter placement to create tension/escalation.
- Authored enemy behavior using behavior trees + EQS-style senses; tuned navmesh, spawn timers, and aggro radius for readable combat spaces.
- Built Blueprint systems for pickups, simple inventory, and wave logic; added debug tools (on-screen counters, toggles) for fast iteration.
- Tech: UE5, Blueprints, Behavior Trees, NavMesh, DataTables, Perception

Hidden Object Room Game - Unreal + MQTT (IoT-connected) - Infinia Engineering

- Created a room-scale hidden-object experience where real devices communicate with the game via MQTT (Pub/Sub).
- Designed a topic schema, payload format, and debounce/back-pressure logic to keep gameplay responsive and fault-tolerant.
- Implemented an Item Placer actor that spawns items by size/category and reports provenance for analytics and “found” tracking.
- Built a UI bar that shows target objects; added respawn/replace rules after an item is found to sustain challenge.
- Tech: UE5, Blueprint, MQTT (Mosquitto), JSON payloads

BranchGPT Client - React Flow (Visual Conversation Timeline)

- Built a web client that displays branched AI conversations as a visual timeline; each node can have multiple parents.
- Implemented efficient state management and lazy loading for large trees; created a node details panel with metadata.
- Defined an interface to plug in different LLM backends and enforce context-building rules before calls.
- Tech: TypeScript, React (or similar), Node APIs, Graph rendering

Bubbles - AI-assisted News Summarization Platform (Senior Project)

Role: DevOps Engineer & Scrum Master

- Led the team’s agile workflow as Scrum Master, organizing bi-weekly sprints, backlog grooming, and sprint retrospectives to ensure iterative and high-impact progress.
- Coordinated between frontend, backend, and AI pipeline developers, ensuring alignment on deliverables, code standards, and deployment timelines.
- Implemented CI/CD pipelines and version control policies using GitHub Actions and Railway, automating build, test, and deployment workflows.
- Designed and maintained containerized microservices for the summarization and data-processing layers, enabling scalable backend deployments on cloud platforms.
- Managed MongoDB Atlas clusters and API endpoints for real-time data access, ensuring data integrity, index optimization, and compliance with KVKK/GDPR data handling standards.
- Built admin views to monitor enrichment stages, visualize data health, and handle task retries or failures efficiently.
- Maintained system observability through structured logging, health checks, and environment monitoring.
- Contributed to documentation of architecture diagrams, team communication protocols, and CI/CD best practices for future scalability

Home Assistant AI Agent - Node-RED / Python

- Orchestrated flows that combine device context with LLM outputs to create context-aware automations (greetings, reminders).
- Integrated external AI endpoints with rate limits, retries, and guardrails; exposed control via dashboards.
- Tech: Node-RED, Python, REST, HA integrations