

VADYM KHAVRONENKO

Unity VR Developer | C#/.NET Engineer | Full-Stack Developer

LinkedIn: [linkedin.com/in/vadym-k-736051223](https://www.linkedin.com/in/vadym-k-736051223) | Email: baksikpro@gmail.com | Phone: +380994165155

PROFESSIONAL EXPERIENCE

Unity VR Developer | Whale Rock Games | 2022 - Present

Developing VR games as solo developer with full cycle control. Key projects:

- **Race Craft** - VR Racing with combat elements. Multiplayer (Mirror, up to 6 players), AI bots, cross-platform (VR/PC/Android/WebGL). Optimized for 90 FPS.
- **TimeLock VR 3** - VR space quest. Hired and managed scriptwriters and game designers.
- **TimeLock VR 2** - Released on Steam (2022). Ported to PS4 (Sony devkit), GOG (OpenXR). Graphics update to URP completed.
- **We Are The Dwarves** - Updated engine deployment, ported to Epic Games Store with achievements.

Unity VR Developer | Advin (VR NOW) | 2021 - 2023

Developed VR rehabilitation system for amputees - phantom pain treatment. Worked directly with rehabilitation specialists.

- Built admin panel for doctors: patient parameters, avatar control, exercise tracking
- Implemented controls for Valve Index and HTC Vive (trackers problematic for amputees, primarily used Index)
- Created interactive VR environments with therapeutic exercises (football, tennis, everyday objects)
- Also developed: TimeLock VR 2, historical river navigation simulation

Product: vrnow.health | adv.ua/vr-now

C#/.NET Software Engineer | Private Company (NDA) | Sep 2024 - Sep 2025

Solo developer. Automated document workflows and data management systems.

- Daily ETL operations: automated import of Excel forms, normalization, deduplication, validation
- Document processing: parsed multilingual unstructured text, extracted dates/events
- Automated monthly reports from Excel/Word templates. Reduced manual errors by 95%
- Tech: .NET 8, C#, ClosedXML, NPOI, Regex, LINQ, SQL Server

Unity Developer | Mini-Apps & SDK Integration | Kyiv | 2020 - 2021

Created Android mini-apps integrating AppsFlyer, Facebook, OneSignal SDKs. Managed organic/non-organic data, JSON parsing, WebView embedding. Published test games, compiled Unity projects in Android Studio.

Unity Developer & Robotics Educator | "Step" and "Robohaus" | Kyiv

Taught Unity and robotics (Arduino) to children. Transitioned from PlayMaker visual scripting to C# coding.

KEY PERSONAL PROJECTS

Site Agent - Multi-Tenant Customer Support AI Platform (2025)

Enterprise-grade platform: AI assistant + real-time operator handoff + multi-tenancy. RAG pipeline (vector + keyword search), SignalR real-time chat, confidence scoring with auto-escalation.

Tech: ASP.NET Core 8, EF Core, SignalR, SQL Server, Redis, OpenAI GPT, Shadow DOM, Hangfire, Polly, Serilog

MechaLearn / MechaPulse - VR Robotics Education & Battle Platform (2023-2025)

Educational platform combining microcontroller programming, mechatronics, and 3D modeling. Battle mode with Quake-style mech combat in VR. Exhibited at Game Gathering, Kyiv.

Tech: Unity, C#, Mirror networking, Arduino/ESP32/Raspberry Pi integration via Serial API

AI News Analyzer Bot - Smart News Analysis System (2024)

Automated news analysis, generation, trend detection using OpenAI GPT-4o. Multilingual (RU/EN/UA). Web interface + Telegram bot.

Tech: ASP.NET Core, EF Core, SQL Server, OpenAI API, VPS (Linux/Ubuntu)

TECHNICAL SKILLS

Game Dev / VR: Unity (since 2017), HDRP/URP, XR Interaction Toolkit, OpenXR, Oculus SDK, SteamVR, Valve Index, HTC Vive, PS4 devkit, Mirror/Photon networking, Amplify Shader, DOTs

.NET / Backend: ASP.NET Core 8, .NET 8, EF Core, SignalR, LINQ, Clean Architecture, Multi-tenant systems, REST API, Hangfire, Polly

AI / ML: OpenAI API (GPT-4), RAG (vector + keyword search), embeddings, prompt engineering, confidence scoring, guardrails

Data / ETL: SQL Server, Redis, ClosedXML, NPOI, Excel/Word automation, Regex, ETL pipelines, data validation

Frontend / Web: JavaScript basics, React/Vue.js basics, TypeScript basics, WebGL basics, Shadow DOM (web scraping/analyzers)

DevOps / Tools: Git, Docker, GitHub Actions, Azure, Linux/VPS, Serilog, CI/CD

Hardware / IoT: Arduino, ESP32, Raspberry Pi, sensor integration, Serial API, PWM/ADC/I2C/UART

Other: Solidity/Web3, PowerShell, Python basics, Agile/Scrum, Jira/Trello