Edouard Murat - Gameplay Programmer

St-Leonard (QC) H1R 2X5 | 514-804-5475 | edouardmurat1@gmail.com
Portfolio: edouardmurat.com | GitHub: github.com/MuratEdouard
French: fluent | English: fluent

OBJECTIVE

Gameplay programmer with 15+ years of experience and a background in computer engineering. Specializes in gameplay systems, AI behavior, procedural generation, shader programming, and user interaction. Experienced with Unity and Godot, and passionate about crafting smooth, engaging in-game experiences. Shipped games on Steam, Google Play, and Apple Store.

TECHNICAL SKILLS

- Game Engines: Unity, Godot
- Programming Languages: C#, GDScript, Python, Java, HTML/CSS/JS
- Shader & Graphics: Shader scripting (Godot, Unity)
- Gameplay Systems: Input (keyboard & mobile), AI behaviors, procedural generation, physics-based mechanics, state machines, combat systems
- Tools & Frameworks: Git, GitHub, Blender, VS Code, Django, SQLite, Audacity
- Other: Agile workflows, UI integration, performance optimization

GAME PROJECTS

(Full list of playable games at edouardmurat.com)

Base of 30 (Unity) - *Rogue hack & slash through procedurally generated rooms* 2025
- Designed and implemented all core gameplay systems, including combat mechanics and player progression
- Developed a procedural generation system for room layouts, obstacle placement, and navigation paths
- Built custom behavior trees for diverse enemy types with unique attack patterns and movement logic

Aerial Ambush (Unity) - *Skill-based platformer with homing missiles* 2025
- Implemented responsive, high-speed player movement with precise collision handling for tight controls
- Developed homing missile AI with adjustable targeting behavior and physics-based steering
- Designed and balanced dodge-based gameplay loops to support short sessions, and high replayability

Agent Ka (Godot) - *Waldo-like game in a generated city with crowds and powers* 2024
- Built a procedural city generation system with randomized buildings, roads, and crowd populations
- Programmed crowd simulation with dynamic movement, behaviors, and density-based logic
- Implemented power-based features, including X-ray, mini-cameras, and slow-motion via custom shaders

Veggies Island (Godot) - *Farming game on a cartoonish island* 2024
- Implemented core farming loop including planting, watering, harvesting, and crop growth stages
- Built a procedural island generation system with randomized terrain, resources, and farm zones
- Developed a lightweight inventory system to track and manage harvested crops and seeds

Pico Golf (Godot) - *Mini golf challenges with physics-based terrain* 2023
- Designed and implemented 3D mini-golf courses with increasing difficulty and diverse sea-floor layouts
- Integrated animated fish, underwater effects, and custom shaders for water and caustics to enhance immersion
- Developed audio-visual feedback systems to reinforce a calming, low-pressure gameplay experience

Tomb (Godot) - *Doom-inspired shooter for Godot Wild Jam #42* 2022
- Developed from scratch in under one week during a jam, showcasing rapid prototyping ability
- Engineered a responsive arcade-style shooter feel, including player movement, shooting, and health systems
- Designed hand-crafted enemy AI using state machines and pathfinding logic with trap systems

Earlier titles include Left 4 Dead 2D, Meditation Card Game, Fruit, Archer, and Meditation World VR

PROFESSIONAL EXPERIENCE

Game Developer - EdNoKa, Montreal 2022 - Present

Created an educational gaming platform blending custom-built quizzes with gameplay across various genres (farming, hack & slash, platformer, puzzle, sports). Led all game design, programming, backend integration, and publishing efforts.

- Released 5+ fully playable games using Unity and Godot, integrating real-time quizzes into diverse gameplay loops
- Designed and implemented gameplay systems: player control, AI, procedural generation, level logic, scoring, and feedback
- Implemented unified input systems to support both keyboard and mobile touch controls across all games
- Created custom shaders to enhance visual storytelling, atmosphere, and UX (e.g., X-ray vision, mini-cameras, 3D Text, underwater effects)
- Built and maintained a full-stack backend using Django: user authentication, data storage, in-game unlockables, and content delivery
- Developed in-game economy systems and store integration, including quiz packs and premium unlockables
- Published public betas on Steam (playtest), Google Play, and Apple Store with build pipelines and update workflows
- Designed the web platform (ednoka.com) to showcase games, manage user data, and support content creation
- Managed Agile development cycles, Git versioning, and testing across multiple devices

Web Developer and Graphic Designer - HeadPause, Montreal 2018 - 2020

- Developed company website and maintained online presence
- Created animations, visual assets, and ran social ad campaigns

EDUCATION

B.A. Psychology - Concordia University, Montreal 2015 - 2017

B.Eng. Computer Engineering - University of Sherbrooke, Sherbrooke 2005 - 2009

College Diploma - DEC in Sciences - Stanislas College, Montreal 2003 - 2005

CERTIFICATIONS

Certified Associate Python Programmer, Python Institute 2024

Oracle Professional Certification, Java SE 7 Programmer 2013

Oracle Associate Certification, Java SE 7 Programmer 2012

REFERENCES AVAILABLE UPON REQUEST