

Alex Remotti

2468 Newcastle Crescent
Oakville, ON L6M 4P3, Canada
alex.remotti@outlook.com
+1 365 2928560

Website Link:

Video-reels / work & personal projects / galleries / examples / history
<https://alexremotti.info>

PDF digital Portfolio:

https://alexremotti.info/2D_Portfolio_April_2025.pdf

Moby Games:

<https://www.mobygames.com/person/53308/alex-remotti/>

Giant Bomb:

<https://www.giantbomb.com/alex-remotti/3040-63194/>

PERSONAL PROFILE

I am looking for a Technical Art Tool Programmer position that allows me to apply and share my 27 years of experience in the videogame industry.

I have been in Technical Art and Technical Director positions but also really excel in Principal individual contributor positions.

I worked on **GTAV, Red Dead Redemption 2, GATVI, The Division, EA WRC 2023, League of Legends**, and many other **AAA titles** on many important and well-known features.

I am highly specialized in procedural contents, and I am skilled both on the technical / coding side and on the content / art / shader pipelines. I keep myself up to date and have multiple Harvard Certifications in **Computer Science for Artificial Intelligence**, Videogames and Business.

Focus on technical solutions, procedural assisted creation, and innovation.

Problem solving and collaboration with the other department are keywords for my approach to the solutions. I am proficient at coding and very open to working hands-on on the implementation of solutions.

Driving and leading by example is my way to go.

I have a strong knowledge of videogame pipeline and production as I have been involved in many aspects of the game development since 1998

My main focuses are:

- Improving production and creative iteration times for the team
- supporting the team objectives and ideal workflows

- overcoming technical obstacles
- automating tedious repetitive tasks
- removing unnecessary steps
- optimizing the product contents
- Unlocking creative opportunities

I have managed small, medium & large size teams of developers from prototype stage to shelve retail of multiplatform licensed titles for Nintendo Wii/Ds and iOS.

I worked on multiple AAA title for Mobile (iOS/Android) / Xbox 360 / Xbox One / Xbox X / PS4 / PS5 / Low & High spec PCs.

I have a clear vision.

In conjunction with project post-mortem and documentation, I help prepare preventative solutions.

I try to keep things organized and documented, and I focus on finding a proper owner for each tool or part of the pipeline within my team.

I keep myself up to date about games and platforms, looking out for quality and technical innovations.

SOFTWARE SKILLS

- Visual Studio / Visual Studio Code (C++, C, C#, Python, Java, Basic)
- Houdini, 3D Studio Max, Maya, Photoshop, Substance Designer/Painter, World Machine, Perforce, Jira, Confluence, SVN, GitHub
- XCode (iOS SDK, Cocos2d)
- Codewarrior (PS2, DS, DSi, Wii, PC)
- Eclipse (Android SDK, Google Kit)
- DirectX 9/10/11/12, HLSL shader models 2/3/4/5/6
- OpenGL, GLSL
- Animation tools: Maya, Max Biped, Houdini, Unreal, Mixamo Motion Builder

ENGINES & SDKs

- Unreal Engine 4.2 to 5.5 (C++ engine, modules, plugins)
- Hextech, Riot Games (C++, HLSL, GLSL, shaders node system)
- RAGE, Rockstar Advanced Game Engine (C# pipeline tools, HLSL tools shaders)
- Snowdrop, Ubisoft (nodegraph, C# pipeline tools)
- Unity (C++ processors, C# tools, nodegraph integration, new PBR pipeline)
- CryEngine / Lumberyard (rendering engine, level import plugins)
- Houdini Core / Engine & Houdini HDK (C# bespoke port, python tools, nodegraph processors)
- Ubisoft Art Framework - UAF (shaders, UI, Lua)
- Sony PhyreEngine SDK (AI, collision code)
- PS4 SDK (profiling)
- XNA (C# Engine programming, graphics programming, HLSL PBR pipeline)

- Xbox One SDK (C++ rendering engine, profiling)
- Nintendoware SDK (AI, collision code)
- Renderware (AI, gameplay code)
- Sony PhyreEngine (HLSL), Cocos2D (full mobile games)
- Genesis3D (level logic)
- GameMaker (full web games)
- Build - Duke Nukem (level editing and logic)
- SuperScape (level editing)
- Virtools (nodegraph real-time games for web).

CODING AND SCRIPTING

- C#, C, C++
- Hlsl / Glsl
- Python
- Nodegraphs & Blueprints
- Maxscript
- Vex
- HMTL / CSS / Javascript

WORK EXPERIENCE

Meta (Sept 25 – Now)

Principal Technical Artist

Tasks:

- Proprietary Engine Animation system scripting
- Unity Engine Animation system scripting
- VR NPC Archetype Design
- NPC Logic scripting
- NPC Performance tracing
- GenAI NPC Pipeline design
- Open world terrain system design
- Best practice mentoring
- VR Games tech art support

Task specifics:

- Typescript - NPC Logic modularization.
- Typescript - NPC Logic Prototypes and scalability.
- Maya - NPC animation and retargeting.
- C++ Code - Embodiment prototypes.

Titles:

- Meta Horizon Studio
<https://www.youtube.com/watch?v=viXoK-MJRIs&t=30>

More Human Than Human (May 25 – Sept 25)

Contractor - Technical Director

(Unreal Engine 5.6)

Tasks:

- Unreal Engine 5.6. Oversaw technical Direction and provided tool development, art and technical art contributions. Worked on Visual Studio project creation, tools and plugin choices, development and content creation for the first project prototype.

Task specifics:

- Visual Studio Solution - Full solution setup for coders and Unreal Game Sync distribution for Art team.
- Perforce - User admin and user instruction documentation via Google Sites.
- C++ Modules - Math utilities for procedural mesh manipulation and scattering systems.
- C++ Plugins - Open street map format importer and geometry generation.
- C++ Plugins - Character / Camera and Control system for first and third person with climbing, vaulting and cover system.
- Blueprint Plugins - Procedural City tool based on instance batched models.
- Blueprint Plugins - Spline based street meshes with automatic landscape carving and material ID painting.
- Blueprint Plugins - Character control animation system.
- Blueprint Plugins Enemy AIs.
- Blueprint Plugins In-game menu with mission and real time mini-map.
- Blueprint Plugins GPU Based NPC system.
- Typescript - NPC Logic modularization.
- Typescript - NPC Logic Prototypes and scalability.
- Maya - NPC animation and retargeting.
- C++ Code - Embodiment prototypes.

Titles:

- Unannounced
<https://youtu.be/4dg8gMBZgMo>

People Can Fly (Sep 24 – April 25)

Technical Art Director – Unreal

(Unreal Engine 5.6)

Tasks:

- Unreal Engine Procedural scattering C++ system
- Nanite settings and Art Budgets to bring the game from 5fps to 60fps
- C++ LOD generation
- C++ and Blueprint Geometry Boolean system
- Rivers, lakes spline sculpting tools.
- Water flow attributes based on splines, Blueprint and C++
- Character tinting, tear and wear shaders
- Project millisecond budgets per item

Task specifics:

- C++ Modules - Procedural Mesh geometry attributes read/write.
- C++ Modules - Spline math utilities & Spline manipulation utilities.
- C++ Plugins - Procedural Vegetation scattering native systems updates.
- C++ Plugins - Geometry material ID and sub-meshes optimization.
- C++ Plugins - Raster image to Vector spline areas adapted to world map.
- Blueprint Plugins - River terrain carving and river mesh with water flow generation.
- Blueprint Plugins - Forest spline biomes based and Crops scattering tools.
- HLSL - Vegetation and Rocks shaders. River flow and ocean waves prototypes.

Titles:

- Project Victoria (now called Lost Rift)
https://store.steampowered.com/app/3494520/Lost_Rift/

HoYoverse (Jan 24 – May 24)

Technical Artist / Technical Director Unreal

(Unreal Engine 5.3 / 5.4)

Tasks:

- Visual Studio Solution - Creation & Management
- Perforce Depot management
- C++ Plugins and Modules creation
- Art and Tools Technology Stack
- Blendshapes GPU based implementation
- Unreal Import/Export pipelines
- Lighting tools
- Engine feature prototype and development

Task specifics:

- Visual Studio Solution - Full solution setup for coders and precompiled GDrive distribution for Art team
- C++ Modules - Geometry XTZ to normalized texture RGB values converter. Texture array automated conversion.
- C++ Plugins - FBX importer extension to create multiple assets from single source file.
- Blueprint Plugins - Lighting and levels transition system.
- Houdini Plugins - Hair system attributes management and export HDA tool.
- HLSL - GPU / Texture array based additive blendshape geometry shader.

Titles:

- AI / LLM emotion and dialogue Driven Game:
[Whispers from the Star on Steam](#)

Riot Games (Apr 22 – Dec 23)

Technical Art Director

(HexTech Engine / Unreal Engine)

Tasks:

- Art and Tech Art Technology Stack
- Rendering Pipeline
- Art Workflow
- Engine feature discussion
- Engine feature prototype and development
- Relations with Engineering team Hiring plans & requirements
- Unreal Engine R&D and training

Task specifics:

- C++ Library / HexTech Engine - Audio event propagation to shaders.
- C++ Library / HexTech Engine - Parallax multi-layer real-time Menu system.
- Houdini Plugins - Automated retopologization and reskinning HDA tool for characters.

Titles:

- League of Legends
https://youtu.be/5Xd-0_mkb_s
- Teamfight Tactics
<https://youtu.be/0qilJprYZSc>

CONTRACTOR - **Scopely** (Nov 21 – Apr 22)

Technical Art Director

Tasks:

- Roadmap Creation
- Team tasking and direction
- Development and documentation
- Cross studio & cross time zones collaboration
- Business Development
- Strategy and Research
- Hiring plans & Head count
- Collaboration with Core Tech / Design & Art team on cross-studios tool sets.

Task specifics:

- C++ Libs - Poisson scattering library with dynamic hot-load.
- C# Components - Prebaked - Spline based asset distribution system.
- C# Component - Prebaked - Nodegraph based system to attach entities (rooms, body parts, tree branches, game POIs).
- C# Component - Asset validation and classification for map static elements, gameplay elements and skinned entities.
- GLSL / HLSL - Realtime and Substance PBR shader with support of bent normals and color gradients.

Titles:

- MMO RPG Mobile & PC Unannounced title

CONTRACTOR - EA / Codemasters (Apr 21 – Oct 21)

Principal Technical Artist

(Unreal Engine 4.0 to 4.2)

Tasks:

- Acting Technical Art Director
- Unreal Engine open world procedural tools
- Forest, Crop, Cliffs Tools
- Shader Work
- People hiring / training and Confluence Documentation
- C++ real time processors
- C++ Engine low level work
- LOD Pipeline UI and decimation / creation code

Task specifics:

- C++ Modules - Spline math utilities / Spline manipulation utilities / Spline skinning utilities.
- C++ Engine - Procedural Vegetation scattering and LOD engine systems updates.
- C++ Plugins - Bespoke satellite data conversion to crops, cliff and forest scattering data.
- C/C++ Libs - Data pipeline processor for final LOD backing.
- Blueprint Plugins - LOD backing to depth texture, world normal and albedo. Final LOD always has 7 triangles.
- Blueprint Plugins - Animated and physics-based track delimiting tape tool system.
- HLSL - Per pixel displacement based LOD rendering for farther version.

Titles:

- World Rally Championship
[EA Sports WRC - Wikipedia](#)

CONTRACTOR – **NetEase - LiquidCube Games** (Mar 21 – Nov 21)

Technical Director

(Unreal Engine 4.2 / Unity / Unreal / CryEngine / Lumberyard)

Technical Tasks:

- Houdini Procedural Content Generation Pipeline for: CryEngine, Unreal, Unity
- Tools Pipeline & DI/DC roadmap
- Visual Studio Solution creation
- C++ / C# / Houdini processors pipeline UI and headless versions

Task specifics:

- Visual Studio Solution - Full solution setup for coders for both Unity 19 and Unreal 4.2.
- C/C++ Libs - Cross engine sharable libs for math utils for procedural asset scattering transform batches generation.
- C++ Plugins - Cross engine Qt and pyQT standalone interfaces for buildings, scattering, validation of asset data.
- Houdini Plugins - Cliff and Vegetation systems based on model batch instances.
- Houdini Plugins - Open street map building and road generator with json format output for cross engine digestion.

Management Tasks:

- Workspace creation/organization
- People Hiring, Training & Tasking
- Business Development and Communication

Products:

- Procedural Pipeline Tools (online reel):
<https://www.liquidcubegames.com/procedural-content-creation-wip>
- Procedural Pipeline Results (online reel):
<https://www.liquidcubegames.com/procedural-content-creation>

Rockstar - Toronto (Nov 20 – Mar 21)

Associate Principal Tools Programmer

Tasks:

- Pipeline Tools & DI/DC roadmap
- Visual Studio Solution maintenance and deployment
- People Training & Tasking
- C++ and C# New Engine & Graphics R&D
- C++ / C# processors pipeline UI and headless versions

Titles:

- GTA V
[Thank You: GTA V - Rockstar Games](#)
- Red Dead Redemption 2
[Red Dead Redemption 2 & Red Dead Online Credits - Rockstar Games](#)
- GTA VI

Rockstar - Toronto (Jan 20 – Nov 20)

Principal Technical Artist

Tasks:

- Tech Art Tools roadmap & development
- Visual Studio Solution maintenance and deployment
- People Training & Tasking
- Support for Artists and R&D
- Artist Editors coding

Titles:

- GTA V
- Red Dead Redemption 2
[Red Dead Redemption II credits](#)
- GTA VI

Rockstar - Toronto (April 18 – Jan 20)

Senior Technical Artist

Tasks:

- Technical Problem Solving

- People Training
- Support for Artists
- Artist Editors coding
- Asset Validation porting (maxscript to C#)

Titles:

- Red Dead Redemption 2
[Red Dead Redemption II credits](#)

Cloud Imperium Games (Dec 16 – February 18)

Lead Technical Artist

Tasks:

- Technical Problem Solving
- People Training
- Support for Artists & Game / Level Design
- Leading development of Procedural Technologies
- Content generation system for Outposts, Interiors and Urban Environments
- Core Procedural C++ functionality for offline procedural generation
- Core Tools & UI Interface development for Artists (Python / QT)
- Wiki documentation & video on demand training

Management Tasks:

- Long term Vision & Planning of scalable procedural content
- Hiring & Career development
- Peer / people review
- Sprint management

Optimization:

- Material tinting / cloning & instancing
- Modular kits creation tools

Titles:

- Star Citizen v 2.7 (TC demo and interview)
<https://youtu.be/NxBdyyGx7vM?t=1408>
- Star Citizen v 3.0.0 (on Stage demo)
<https://youtu.be/mGcG0g7GsOI?t=1921>

Atom Bank (June 16 – Sept 16)

Technical Designer / Unity Developer

Tasks:

- Writing Business Case for new Engine Technology
- Xamarin Engine Development
- Unity Research & Development for 3D Environments and Interfaces
- XCode development and creation of Art and Design tools
- Asset examples creation for Pages and models
- Reporting to Head of Development and UI for progresses

Core Projects:

- Visual Studio Xamarin Android and IOS solution, written and documented.
- Atom Page Editor. A page visual designer for Art and design team. XML export format.
- C# Serializer/Deserializer for XML contents

Project Management:

- Business Case PPT and DOC
- Agreements on strategies for designers training

Project Titles:

- Atom Bank Client (Android)
- Atom Bank Client (iOS)
- APE - (Mac – Atom Page Editor)
- Xamarin Engine - (PC & Mac – New Engine source code)

[Download the Atom bank app | Atom bank](#)

Ubisoft - Reflections (May 13 – May 16)

Senior Technical Artist

Tasks:

- Technical Problem Solving
- People Training
- Support for Artists and UI department
- Core Snowdrop Engine Tools
- Core 3D Map Generation Tools

Research & Development:

- Procedural generative systems for maps and missions for The Division Underground DLC
- UI Prototyping (Loot, Skill selection, Grenades, Cross Air)
- Snow and Shaders Development
- The Division Skill Animated and Interactive System (Vehicles and Skill/Abilities Props)

Optimization:

- Tracking and automation Tools Development

Titles:

- Just Dance 2014 - for Xbox One, PS4, Wii U, Wii and Mobile.
 - Just Dance 2015 - for Xbox One, PS4, Wii U.
 - The Division - Xbox One, PS4 and PC
 - The Division DLC Underground - Xbox One, PS4 and PC
- [2016 The Division launch.jpg \(1080x871\) \(alexremotti.info\)](#)

Independent Game Developer (Sept 09 – May 13)
Senior Engine Programmer / Gameplay Programmer

Clients:

- **GameStop**
- **Fox TV**
- **Mimilab Games**
- **Maga Animation Studio**

Tasks:

- Engine Development
- Game play programming
- 2D and 3D Assets creation
- Game Design Doc (from client idea to GDD)
- Hardware Manufacturers Approvals for Nintendo DS, Xbox Indie, iOS

Core Projects:

- Xbox 360 - Fallen Angel
(Game Engine 360: menu, rendering, collisions, input, sound, anims, postFX, shaders)
- iPhone games:
 - o Pepita-Up - iPhone (MIMILAB)
 - o Frame Fixer - iPhone (MIMILAB)
 - o Furu Furu – iPhone (MIMILAB)
- Facebook, Twitter, Game Centre, In-App purchase development
- Wingers - PC - MMORPG (AIOMI)
- Genial Football - PC (SIE GROUP)
- L'Enigmistica - Nintendo DS (GameStop - FIV5)
- Java Remote Studio Management tool for Maga Animation Studio (TV production studio)

Virtual Identity SRL (Mar 03 – Sept 09)

Cofounder - Technical Director

Tasks:

- Engine and Tools Development
- Bank and Sponsors relations
- Employees Interview
- Events Booths at GDC, ECTS, E3 and GDF
- Technical Direction

Titles:

- Terkel The Game - for PC (OFFICINE UBU)
- Horrible Histories - for PC (Slitherine)
- Horrible Histories - for Nintendo Wii (Slitherine)
[2009 horrible histories CEO.jpg \(1024x1197\) \(alexremotti.info\)](#)
- Horrible Histories - for Nintendo DS (Slitherine)
- Pirates Party - for Nintendo Wii (Mamba Lace)
- Pirates Party - for Nintendo DS (Mamba Lace)
- The Black Corsair - for PC (AKELLA)

Telecom – Digital Identity – Sun Microsystem (Nov 00 – Mar 03)

Lead Developer

Tasks:

- Tech Research & Development
- Software and SDKs work (java, Real Technologies, PHP)
- Image processing and 3D mapping
- UI Design
- Streaming Live system development (ISDN to Cable connections)
- Project Design

Titles:

- San Babila - PC 3D Conference system (Government and TV usage)
- FastCoder – TV & Events - encoding and streaming for PC

Ubisoft - Milan (Sept 99 – Oct 00)

Game Designer

Tasks:

- Game Design Document
- Usage of Tools for tweaking
- UI Design
- Scripting with Internal Engines

Titles:

- Rayman Arena - for PS2
- Formula 1 Racing Championship - for Game Boy Color
- Rayman GBC - for Game Boy Color
- Donald Duck Operation Quack – for Game Boy Color

Virtual System (Oct 98 – May 99)

Cofounder, Level Designer

- Tasks:
- Level Design
- Level creation
- Level scripting

Titles:

- Duke Nukem 3D - Commercial Star Trek game conversion – for Renault Multiplayer Events

EDUCATION

HarvardX - Computer Science for Artificial Intelligence

<https://credentials.edx.org/credentials/972e8b8b538a418696ec91a74871140c/>

HarvardX - Computer Science for Business Professionals

<https://courses.edx.org/certificates/da10f5a41d06444eaefcb1955f158e12>

HarvardX - Computer Science Introduction – CS50X

<https://courses.edx.org/certificates/3bc2054f0b364669b12aa0fd3abd829b>

HarvardX - Computer Science Introduction - Game Development

<https://courses.edx.org/certificates/4f805ca42c364f88a2f2fa882cd7b460>

HarvardX - Computer Science for Game Development – Professional Certificate

<https://credentials.edx.org/credentials/cd7e255bad84422fa2bbf1e9335285dd/>

C# Game Development - Teacher (Mar 2013–April 2023)

Salerno Videogame Development University (IUDAV), Salerno (Italy)

Software Evangelist (2001 - 2003)

Virtools Evangelist for Italy (Pico Srl)

LANGUAGES

- Italian: Native
- English: Fluent

HOBBIES AND INTERESTS

I play videogames extensively and enjoy looking at them and understanding how they may have been made.

I watch many TV series and movies. My prefer genres are Fantasy and Sci-Fi.

I am constantly studying and working on personal projects.

Other than this, I love summer and holidays in sunny places.

I practiced swimming and martial arts for a long time.

I have a wife and a kid, and we enjoy our time together with walks and simple activities.