

Start at 14:32:20 in 12/02/2024

Sources

Voici la liste de tout les documents que j'ai utilise pour faire ce projet. Il y a des sites et des videos. Les sites sont classes par ordre alphabetique et les videos par ordre de duree.

Sites

-  Organisation d'un graphique de matériau dans Unreal Engine | Unreal Engine 5.3 Documentation
-  Texture Merging With UCanvasRenderTarget2D - Old UE4 Wiki
-  Accessing pixel values of Texture2D - Asset Creation - Epic Developer Community Forums
-  Activating the Virtual Scouting Tools| Unreal Engine 4.27 Documentation
-  Application Manifests for Release Builds | Oculus Developers
-  Applying a Physics Constraint Profile in Unreal Engine | Unreal Engine 5.0 Documentation
-  Bing Maps Tile System - Bing Maps | Microsoft Learn
-  Call REST API using HTTP & JSON from UE5 C++ | Community tutorial

Cesium for Unreal Quickstart ↗ Cesium

Cesium for Unreal ↗ Cesium

-  Cesium for Unreal in Code Plugins - UE Marketplace
-  Collision Tutorials in Unreal Engine | Unreal Engine 5.3 Documentation
-  Collision in Unreal Engine - Overview | Unreal Engine 5.0 Documentation
-  Collisions in VR and movement - XR Development - Epic Developer Community Forums
-  Community Tutorial Unreal Engine 5.3.2 for Meta Quest VR - Tutorial & Course Discussions - Epic Developer Community Forums
-  Creating Your First Meta Quest VR App in Unreal Engine Unreal | Oculus Developers
-  Creating a new Material in C++ - Rendering - Epic Developer Community Forums
-  Demos - Tangram Docs
-  Digital Elevation Model (DEM) Data
-  Documentation - Mapzen

Dotvision_MyMotion Release Channel

-  Downloading Images? Imagewrapper? - 5 by Thoth_FN - Mobile - Epic Developer Community Forums
-  Events in Unreal Engine | Unreal Engine 5.0 Documentation
-  FMath | Unreal Engine Documentation
-  Fly-away physics collision trouble - World Creation - Epic Developer Community Forums
-  GitHub - EverNewJoy/VictoryPlugin Rama's Victory BP Plugin
-  Goulandis
-  HTTP Requests for Blueprints in Code Plugins - UE Marketplace
-  How can I get an image from a URL and use it as a texture without using C++? - 2 by DevilsD - Rendering - Epic Developer Community Forums
-  How to combine two textures - 2 by anonymous_user_95ce03cf - Rendering - Epic Developer Community Forums
-  How to create a material using a texture in c++? - C++ - Epic Developer Community Forums
-  How to create textures at runtime and assign them to a mesh? - 2 by anonymous_user_21686246 - C++ - Epic Developer Community Forums
-  How to make the VR hands' collision as complex shape which seperate each finger BUT not a shpere? - XR Development - Epic Developer Community Forums
-  How to merge 2 (unique) textures into 1 larger texture - Asset Creation - Epic Developer Community Forums
-  How to merge 2 2D Texture assets into 1? - 2 by RecourseDesign - Programming & Scripting - Epic Developer Community Forums
-  How to rotate a object(wheel/propeller) when using Rotating Movement Component? - 2 by ClockworkOcean - Character & Animation - Epic Developer Community Forums
-  How to use box collision with VR hands on UE5? - 2 by SupportiveEntity - Blueprint - Epic Developer Community Forums
-  Learn How to Use Unreal Engine - A Powerful Real-Time 3D Creation Platform
-  Lighting on the Oculus Quest - XR Development - Epic Developer Community Forums
-  Lighting settings for VR, messed up on Light Build - Debugging, Optimization, & Profiling - Epic Developer Community Forums
-  Math Material Expressions in Unreal Engine | Unreal Engine 5.2 Documentation
-  Media Framework Technical Reference | Unreal Engine 4.27 Documentation



Navigating the World in VR Mode | Unreal Engine 5.0 Documentation

Petr Leontev - Tech Entrepreneur & Unreal Engineer| Efficient and asynchronous creation of textures at runtime in Unreal Engine

Photopea | Online Photo Editor



Physics Constraint Component User Guide | Unreal Engine 4.27 Documentation



Physics Constraints in Unreal Engine | Unreal Engine 5.3 Documentation



Play a Video Stream | Unreal Engine 4.27 Documentation

Preview Apps cover image change - Alpha channel re... - Meta Community Forums - 963738



Pricing - 3D-Mapper | Create Your Own 3D Map Online



Procedurals Material Functions in Unreal Engine | Unreal Engine 5.0 Documentation



Recommended Asset Naming Conventions in Unreal Engine projects. | Unreal Engine 4.27 Documentation



Reddit - Dive into anything



Reddit - Dive into anything



Repeat Action | Unreal Engine Documentation



ScienceDirect



Set Actor Location And Rotation | Unreal Engine Documentation



Set the VR Pawn location and rotation to camera - Programming & Scripting - Epic Developer Community Forums



Setting Up Character Movement | Unreal Engine 4.27 Documentation



Setting Up Character Movement | Unreal Engine 5.0 Documentation



Setting Up Collisions With Static Meshes in Unreal Engine | Unreal Engine 5.3 Documentation



Signing Android Projects for Release on the Google Play Store with Unreal Engine | Unreal Engine 5.3 Documentation



Supported XR Devices in Unreal Engine | Unreal Engine 5.3 Documentation

Telechargez une image - remove.bg



Terrain Tiles - Registry of Open Data on AWS



UE4 - Programmatically create a new material and inner nodes - Isara Tech.



UE4 create texture from C++ - Stack Overflow



UTexture2D | Unreal Engine 5.2 Documentation



Unreal Engine 5.3.2 for Meta Quest VR | Community tutorial



Upload an image using HTTP POST request C++ | Community tutorial



VR Template in Unreal Engine | Unreal Engine 5.0 Documentation



Web Browser Plugin

Web Browser Widget | Unreal Engine Community Wiki



android - How to view AndroidManifest.xml from APK file? - Stack Overflow



graphics - How to read data from a UTexture2D in C++ - Stack Overflow



joerd/docs/data-sources.md at master · tilezen/joerd



physics object flies away due the collision with the landscape - Programming & Scripting
- Epic Developer Community Forums



stb/stb_image.h at master · nothings/stb



■ Victory Plugin ~ 's Extra Blueprint Nodes for UE5, No C++ Required! - Blueprint - Epic
Developer Community Forums

Videos



Smart Poly ---- None



Unreal Sensei ---- None



Matt Aspland ---- None



Unreal ART With Alireza ---- None



Unreal Engine ---- None



How To Turn On Developer Mode on Oculus Quest & Quest 2 (In 1 Minute!) ---- 1m 0s



How To Fix VR Pawn Collision in Unreal Engine VR Template ---- 1m 14s



Unreal 5 - Automatic Landscapes (HEIGHT-MAPS) ---- 1m 34s



- ▶ Developing Interactive UI - 1 Unreal Engine 4 User Interface Tutorial Series ---- 1m 37s
 

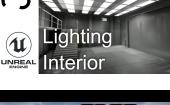
- ▶ Import Objects From Blender to Unreal 5 (2 MINUTES!!) ---- 1m 42s
 

- ▶ Unreal Engine 5 Quick Tip Making Rotating Objects ---- 1m 48s
 

- ▶ Landscape generation 4 - shading | Unreal Engine ---- 1m 51s
 

- ▶ Nuitrack For Unreal Engine 5 (Blueprints) | How to Start ---- 2m 1s
 

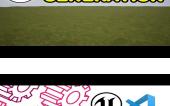
- ▶ Unreal 5 - Auto Materials (2 MINUTES!!) ---- 2m 22s
 

- ▶ Unreal Engine 4 Interior Lighting ---- 2m 29s
 

- ▶ BEST Free Plugin for Procedural Generation in Unreal Engine! ---- 2m 31s
 

- ▶ Unreal Engine -- Spawn & Destroy | 01 | Spawning from the Level Blueprint ---- 3m 47s
 

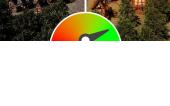
- ▶ Errant Worlds - New Procedural Tools for Unreal Engine - Now available! ---- 4m 15s
 

- ▶ Landscape generation 3 - Perlin Noise | Unreal Engine ---- 4m 29s
 

- ▶ How to use visual studio code for unreal engine ---- 4m 38s
 

- ▶ Procedural Generation (PCG) under 5 mins in Unreal Engine 5! ---- 4m 44s
 

- ▶ UE5 I Spawning Decal on Your Level I 5-Minute Material Tutorial I Unreal Engine 5 ---- 4m 48s
 

- ▶ Unreal Engine Procedural Content Optimization Boost Performance with These 3 Tips! ---- 4m 52s
 

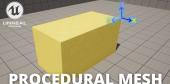
- ▶ Simple Menu for Virtual Reality with UMG in Unreal Engine ---- 5m 7s
 
- ▶ UE5 - Mettre un ICON et une VIDEO de chargement a son JEUX ---- 5m 15s
 
- ▶ Adding Button Functionality - 7 Unreal Engine 4 User Interface Development Tutorial Series ---- 5m 17s
 
- ▶ AI Random Roam | Basic Roaming - Unreal Engine 5 Tutorial ---- 5m 33s
 
- ▶ Terrain generation for Beginners - Unreal Engine tutorial ---- 5m 47s
 
- ▶ Comment mettre de l'herbe animee sur UE5 ? ---- 5m 47s
 
- ▶ Comment mettre une texture video sur Unreal Engine ? ---- 5m 52s
 
- ▶ Install APKs From Inside Your Quest 2 ---- 5m 57s
 
- ▶ Landscape generation 2 - terrain | Unreal Engine ---- 5m 59s
 
- ▶ How To Properly Export From Blender To Unreal Without Losing Textures ---- 6m 0s
 
- ▶ Ce projet Unreal est MAGNIFIQUE ! ---- 6m 0s
 
- ▶ UE5 C++ 1 - How To Read and Write Text Files with C++? - Unreal Engine Tutorial Editor CPP ---- 6m 1s
 
- ▶ Unreal Engine 5.2 - Next-Gen Graphics Tech Demo | State of Unreal 2023 ---- 6m 23s
 
- ▶ Getting Started With The New Environment Light Mixer Inside Unreal Engine 4.26 ---- 6m 29s
 
- ▶ Importing UI Assets - 4 Unreal Engine 4 User Interface Development Tutorial Series ---- 6m 30s
 

- ▶ Buttons & States - 6 Unreal Engine 4 User Interface Development Tutorial Series ---- 6m 36s
 

- ▶ Unreal Engine 4 Oculus Quest Hand Tracking & Controllers ---- 6m 45s
 

- ▶ UE4 C++ Tutorial - How To Change Material - UE4 / Unreal Engine 4 Intro to C++ ---- 6m 46s
 

- ▶ Let's Make A Physical VR Button In Unreal Engine 5.3 ---- 6m 46s
 

- ▶ How to Make a Simple Procedural Mesh in Unreal Engine 5 - Geometry Script Tutorial ---- 6m 51s
 

- ▶ UE4 C++ Tutorial - Dynamic Materials - UE4 / Unreal Engine 4 Intro to C++ ---- 6m 52s
 

- ▶ Procedural Moss Material in UE5 w/ Displacement ---- 6m 58s
 

- ▶ Pro Game Animation Is EASY Now (Try This!) ---- 6m 59s
 

- ▶ Introduction to Chaos Destructible Mesh in Unreal Engine 5 - Learn The Basics in 7 Minutes! ---- 7m 2s
 

- ▶ How to install the MetaXR plugin to Unreal Engine 5 correctly ---- 7m 6s
 

- ▶ Widget Introduction - 2 Unreal Engine 4 User Interface Development Tutorial Series ---- 7m 15s
 

- ▶ Displaying UI Widgets On Screen - 5 Unreal Engine 4 User Interface Development Tutorial Series ---- 7m 23s
 

- ▶ UE5 C++ 5 - How To Read and Write Data Table Json with C++? - Unreal Engine Tutorial Editor CPP ---- 7m 57s
 

- ▶ Unreal Engine 5 - Google Maps API & Cesium - Full tutorial PT 1 ---- 8m 1s
 

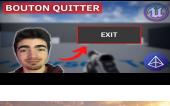
- ▶ create INFINITE Realistic world in Unreal Engine ---- 8m 10s
 

- ▶ COMMENT LIBÉRER DE L'ESPACE DISQUE DUR SUR SON PC !
 

- ▶ UE5 Blueprint Tutorial - How to Create Dynamic Material Instances ---- 8m 13s
 

- ▶ Unreal Engine 5 UE5 Free Tutorial - How To Tile Textures To The World In Unreal ---- 8m 16s
 

- ▶ UE5 - Comment changer de map ? ---- 8m 35s
 

- ▶ Comment faire un bouton QUITTER sur UNREAL ENGINE 5 ? ---- 8m 52s
 

- ▶ 10 Fonctionnalites d'Unreal Engine Incroyables pour 2024 ---- 9m 13s
 

- ▶ UE4 - Tutorial - Pulsing Emissive Material ---- 9m 24s
 

- ▶ Terrain generation in C++ for Beginners - Unreal Engine tutorial ---- 9m 25s
 

- ▶ UE5 C++ 4 - How To Import and Export Data Table with C++? - Unreal Engine Tutorial Editor CPP ---- 9m 25s
 

- ▶ Unreal Engine 5 Tutoriel DebutantLandmass ---- 9m 27s
 

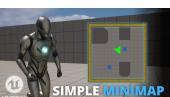
- ▶ Unreal Engine 5 C++ Blueprint Function Library Tutorial Create Own Blueprint Code With C++ For UE5 ---- 9m 29s
 

- ▶ Creating Your First UI Widget BlueprintUnreal basics 101 course 4 ---- 9m 30s
 

- ▶ My Guide To Realistic Lighting in Unreal Engine 5 ---- 9m 39s
 

- ▶ Placing Objects - 3 Unreal Engine 4 User Interface Development Tutorial Series ---- 9m 43s
 

- ▶ Switching Objects in Unreal Engine 5 Using Blueprints ---- 9m 44s
 

- ▶ Oculus Quest Hand Tracking: Custom Skeletal Mesh ---- 9m 50s
 
- ▶ How to Create a Map EXTREMELY FAST in UE5 ---- 9m 55s
 
- ▶ Float Menu X - Unreal Engine 5 - Tutorial ---- 9m 55s
 
- ▶ UE5 C++ 3 - How To Import Assets with C++? - Unreal Engine Tutorial Editor CPP ---- 10m 11s
 
- ▶ Chaos Destruction In Unreal Engine 5 - Part 3: Adding Niagara FX Using The Chaos Data Interface ---- 10m 13s
 
- ▶ How to use Displacement in Unreal Engine 5.2 ---- 10m 14s
 
- ▶ Create a sci-fi HOLOGRAM material shader in Unreal Engine 5 (FREE download) ---- 10m 21s
 
- ▶ How to Make a Simple Minimap in Unreal Engine 5 ---- 10m 22s
 
- ▶ Comment INTÉGRER un objet 3D sur un SITE WEB ---- 10m 23s
 
- ▶ How to Make an Animal AI in Unreal Engine 5 ---- 10m 26s
 
- ▶ Unreal Engine 5 Tutoriel DebutantChaos Destruction ---- 10m 30s
 
- ▶ Introduction to Procedural Meshes in UE4 - Mesh Ops plugin ---- 10m 35s
 
- ▶ 5 Tricks you (probably) don't know about Unreal Engine 5 ---- 10m 44s
 
- ▶ Cette IA genere n'importe quel objet 3D pour Blender ! Luma Genie ---- 11m 9s
 
- ▶ Pro Materials Are EASY Now! (Try This) ---- 11m 19s
 

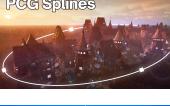
- ▶ Exporter de BLENDER vers UNREAL ENGINE 5 ---- 11m 22s
 
- ▶ UE4 VR Physics Based Hands Interaction(Realistic Hands Interaction part 1) UE4Tuts For YouUE4VR ---- 11m 29s
 
- ▶ Cesium for Unreal Tutorial 01 - Quickstart ---- 11m 31s
 
- ▶ UE4 / Unreal Engine 4 Make a Game C++ Edition - 01 C++ VSCode Setup ---- 11m 40s
 
- ▶ Chaos Destruction In Unreal Engine 5 - Part 2: Controlling Destruction With Anchor Fields ---- 11m 46s
 
- ▶ Chaos Destruction In Unreal Engine 5 - Part 4: Damage Over Time & Accumulated Damage (Master Field) ---- 11m 49s
 
- ▶ Create a Fence using Procedural Content Generation - Unreal Engine 5 PCG Spline Tutorial ---- 12m 13s
 
- ▶ Unreal Dynamic Weather 1 - Wet Materials - UE4 Open World Tutorials 16 ---- 12m 14s
 
- ▶ Chaos Destruction In Unreal Engine 5 - Part 1: Explosions Using Physics Fields ---- 12m 15s
 
- ▶ Unreal Engine How To Sell Plugins 1 Create Plugin ---- 12m 28s
 
- ▶ Making a pawn that can actually turn into a queen | Blender 4.0 ---- 12m 43s
 
- ▶ Unreal Engine 5 - Colliders Explained in 12 min ---- 12m 44s
 
- ▶ Unreal Dynamic Snow Layer - UE4 Open World Tutorials 29 ---- 12m 47s
 
- ▶ Unreal Development Kit Beginner Tutorial Series - 1 Series Introduction ---- 12m 52s
 
- ▶ L'inquietant FUTUR du MMORPG ?! ---- 12m 54s
 

- ▶ Oculus Quest Hand Tracking Quick Start in Unreal Engine 4.26 ---- 13m 5s
 
- ▶ 5 intelligences artificielles qui revolutionnent la creation 3D ! ---- 13m 8s
 
- ▶ UE5 3 Methods for Blocking Out Environments and Level Designs in UE5 ---- 13m 29s
 
- ▶ Faire n'importe quelle ville sur Blender ? ---- 13m 31s
 
- ▶ Adding Virtual Hands to the VR Pawn in Unreal Engine ---- 13m 35s
 
- ▶ UE5 Series Using Displacement in UNREAL Engine 5.3 ---- 14m 0s
 
- ▶ UE5 C++ 2 - How To Read and Write Json Files with C++? - Unreal Engine Tutorial Editor CPP ---- 14m 10s
 
- ▶ Build User Interfaces In VIRTUAL REALITY For Unreal Engine 5 ---- 14m 25s
 
- ▶ Infinite world generation in Unreal Engine ---- 14m 35s
 
- ▶ Unreal Engine 5 Beginner Tutorial - Pirate Of The Caribbean Scene Creation ---- 14m 49s
 
- ▶ Chaos Destruction In Unreal Engine 5 - Part 5: Using Disable Fields To Control Large Simulations ---- 15m 17s
 
- ▶ The Easiest Way to Make a Simple Enemy AI in Unreal Engine 5 ---- 15m 40s
 
- ▶ Getting Started in VR | Physics-Based Hands | Unreal Engine ---- 15m 52s
 
- ▶ How to Salami Slice Mesh In Unreal Engine - Easy ---- 15m 58s
 
- ▶ 25 Tips and Tricks you (probably) don't know about Unreal Engine 5 ---- 16m 6s
 

- ▶ How to Build Quest 2 VR Apps with Unreal Engine 4.27 | VR Development ---- 16m 28s
 

- ▶ Create your own MetaHuman | Unreal Engine 5 tutorial ---- 16m 40s
 

- ▶ Introduction to Dynamic Mesh and Geometry Script in Unreal Engine ---- 16m 54s
 

- ▶ Create Entire Cities Automatically With PCG Splines! Procedural Content Generation in Unreal Engine ---- 16m 57s
 

- ▶ QUICK TRICK to Realistically BLEND ASSETS with LANDSCAPE | UE5 Runtime Virtual Texturing Tutorial ---- 16m 58s
 

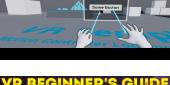
- ▶ Unreal Engine C++ Tutorial - Episode 6 Dynamic Materials ---- 17m 30s
 

- ▶ Painting Ice and Snow On Mesh - UE4 Material ---- 17m 42s
 

- ▶ VR Pawn Movement using Hand Activated Controls - Unreal Engine 4 Tutorial ---- 18m 5s
 

- ▶ Unreal Engine 4 Tutorial - Reactive Snow/Mud ---- 18m 38s
 

- ▶ Hand Tracking Grabbing Objects 1/2 ---- 19m 11s
 

- ▶ Hand Tracking Laser Pointer & Widget in UE4 ---- 19m 35s
 

- ▶ How To Use VIRTUAL REALITY In Unreal Engine 5 | Beginner Tutorial ---- 20m 19s
 

- ▶ Packaging for Oculus Quest 2 - Unreal Engine 5 VR Tutorial ---- 20m 33s
 

- ▶ UE4 - Tutorial - Hologram Material! (Request!) ---- 21m 46s
 

- ▶ Hand Tracking Grabbing Objects 2/2 ---- 22m 1s
 

-  UE5 C++ 0.2 - How To Create Debug Widgets? - Unreal Engine Tutorial
Editor CPP ---- 22m 18s


-  Create Procedural Forest Path Unreal Engine 5.3 - Full PCG Tutorial ----
22m 25s


-  UE4 - Tutorial - Ice! (Ice baby!) ---- 22m 46s


-  UE5 Blueprint Tips - Event Tick Performance ---- 23m 14s


-  Unreal Engine 5 - 3D Elements in Widgets (ALS 142) ---- 24m 9s


-  Brushify - SmartBrush System for UNREAL ENGINE 5 ---- 25m 22s


-  UE4 - Tutorial - Dynamic Materials in BluePrints! (Request!) ---- 25m 29s


-  Procedural Content Generation in UE5 |GDC 2023 ---- 25m 35s


-  UE4 C++ Development for VR, Part 5 (Shooting the Grabbed Object and Wrapping Up) ---- 26m 27s


-  Widget Communication In Unreal Engine 5.1 - Part 1 + Using UMG To Modify An Actor. ---- 26m 44s


-  Introducing EasyMapper for Unreal Engine 5 ---- 28m 47s


-  Comment Creer une IA ENNEMI de BASE | Unreal Engine 4 ---- 29m 7s


-  Virtual Textures Are Now My Favorite Thing ---- 29m 20s


-  Lighting a NIGHT-TIME exterior in Unreal ---- 29m 22s


-  Oculus Quest Hand Tracking Teleportation in UE4 ---- 29m 51s



- ▶ UE5 C++ 0.1 - How To Find Anything In Engine Source? - Unreal Engine Tutorial Editor CPP ---- 30m 8s 

- ▶ Create Stunning Fire Effects in Unreal Engine 5 with Niagara ---- 30m 47s 

- ▶ UE5 C++ 10 - How ToBuild Material Graph with C++? - Unreal Engine Tutorial Editor CPP ---- 31m 51s 

- ▶ Oculus Quest Hand Tracking Gestures in UE4 ---- 33m 21s 

- ▶ Unreal Engine 5 Environment Lighting Tutorial | Part 1 ---- 33m 22s 

- ▶ UE5 Series Using Procedural Foliage Tool in UNREAL Engine ---- 33m 43s 

- ▶ Doxygen Basics ---- 35m 23s 

- ▶ Let's Build the RPG! - 61 - Torch Fire Full Tutorial - Fire and Light in Unreal Engine 5 ---- 36m 20s 

- ▶ Advanced UI Templating Techniques using Widget Blueprints and Materials | Unreal Fest 2022 ---- 39m 47s 

- ▶ Unreal Engine 5 Tutorial - Open World Optimization Don't use actors too much ---- 42m 24s 

- ▶ Creating AR and VR Projects with Unreal Engine | Webinar ---- 46m 9s 

- ▶ Learn Unreal Engine C++ In One Hour ---- 55m 43s 

- ▶ Unreal Niagara Next-Gen Disintegration VFX ---- 59m 21s 

- ▶ UE4 C++ Development for VR, Part 4 (VR Grab Methods: Grip, Force Grab, Magnetic Grip) ---- 1h 4m 6s 

- ▶ UE4 C++ Development for VR, Part 1 (Setting Up the Basic VR Character) ---- 1h 10m 45s 

-  UE4 C++ Development for VR, Part 2 (Shooting Raygun) ---- 1h 15m 32s 
-  Unreal Engine 5 Beginner Tutorial - UE5 Starter Course 2023 unrealengine5megascans cgi ---- 1h 19m 27s 
-  Unreal Engine 5 Tutoriel Débutant - Cours de demarrage UE5! ---- 1h 25m 25s 
-  UE4 C++ Development for VR, Part 3 (Finishing Shooting, Navigation, Teleporting, Fighting with VS) ---- 1h 27m 33s 
-  Your first Virtual Reality Project with Unreal Engine 5.1 ---- 1h 34m 28s 
-  Unreal Engine & C++ Tutorial - Endless Runner Game ---- 1h 34m 37s 
-  Mastering Procedural Open World Creation with PCG and Unreal Engine 5.2 ---- 1h 47m 42s 
-  Apprendre Unreal Engine 5 de A à Z (Formation Débutants) ---- 11h 58m 33s 