

# Georgy Treshchev

Liverpool, UK

Unreal Engine C++ Developer

## Contacts

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## Skills

**Core:** C++, Unreal Engine 4/5, Game Tools/Plugins/SDKs/Middleware development, Multithreading techniques, Third-party integration, Networking, Optimizations

**Familiar:** Git, Perforce, PHP, SQL Databases, ASP.NET

## Experience

### Mod.io — Software development

Jun 2023 — Present

Developed Unreal Engine Plugin C++ SDK for the mod.io platform. Developed the mod.io default UE UI (UMG & Slate) using Common UI best practices.

Implemented a UGC solution for different studios to use. Various optimizations, improvements, and fixes for the UE plugin and SDK codebase. provided support for a cross-platform environment (Windows, Android, Xbox, PS4/PS5, Switch). Assisted various game studios, such as Mundfish Studio, with integrating the mod.io SDK and UGC solutions.

- **Website:** <https://mod.io/>, <https://mod.io/g>
- **GitHub:** <https://github.com/modio/modio-ue>, <https://github.com/modio/modio-ue5-sample>, <https://github.com/modio/modio-ue-component-ui>

### Cognite — Software development

Jun 2022 — Feb 2023

Developed Unreal Engine 3D-visualization SaaS digital application, solving the most complex problems facing industrial companies. The tasks included networking, multithreading, UI implementation (UMG & Slate), optimization and enhancement of systems related to 3D point cloud visualizations and interactions with these objects via the UI for user control.

- **Website:** [https://www.cognite.com/en/product/applications/cognite\\_remote](https://www.cognite.com/en/product/applications/cognite_remote)

## Concurrents — Tools development

Jan 2021 — May 2022

Developed Unreal Engine tools for cloud streaming of game content technology. Responsibilities included creating visualization tools for 3D objects, extending editor functionality, designing a tool to preview “visibility cells” for the GPEG streaming protocol, integrating third-party libraries, and implementing multithreading and multiprocessing to improve the encoding speed of the cells, optimizing the encoding algorithm, and handling tasks related to exporting and streaming game assets, such as sound waves, skeletal meshes, and static meshes at runtime.

- **Website:** <https://www.concurrents.com/>, <https://www.primalspacesystems.com/>

## Self-employed — Plugins development

2017 — Current

Developed a variety of plugins for Unreal Engine, including RuntimeAudioImporter, RuntimeSpeechRecognizer, RuntimeFilesDownloader, RuntimeArchiver, and others. Combined, my plugins have garnered **over 1,100 stars on GitHub**, with the most popular receiving **350+ stars**.

Also provided support and assistance to studios worldwide for plugin integration.

- **Fab:** <https://georgy.dev/fab>
- **GitHub:** <https://github.com/gtreshchev>
- **Docs:** <https://docs.georgy.dev/>
- **Discord:** <https://georgy.dev/discord>

Examples of projects using my plugins:

(The following is a small sample of projects I discovered online. These represent only a fraction of the many projects using my plugins, as most developers do not publicly disclose their usage.)

- **SCUM** (Steam): <https://store.steampowered.com/app/513710/SCUM/>  
(*RuntimeAudioImporter*)
- **Voices of the Void** (Itch.io): <https://mrdrnose.itch.io/votv>  
(*RuntimeAudioImporter* and *RuntimeFilesDownloader*)
- **Official ARENA2 UE project:** <https://git.geomar.de/arena/unreal-development/virtualfieldwork/-/tree/main> (<https://www.geomar.de/en/arena>)  
(*RuntimeSpeechRecognizer* and *RuntimeAudioImporter*)

## Plugins

### **Runtime Audio Importer** 2019

Runtime Audio Importer plugin for Unreal Engine. Import, stream, transcode, and perform other operations on audio in various formats at runtime.

<https://github.com/gtreshchev/RuntimeAudioImporter>

<https://www.fab.com/listings/66e0d72e-982f-4d9e-aaaf-13a1d22efad1>

### **Runtime Speech Recognizer** 2023

Real-time, offline speech recognition plugin for Unreal Engine. Based on Whisper OpenAI technology. Supports GPU acceleration on Windows and optimized CPU processing with intrinsics on other platforms.

<https://github.com/gtreshchev/RuntimeSpeechRecognizer>

<https://www.fab.com/listings/00ffc308-d7f9-4142-ac4c-4aeaa75ab54b>

### **Runtime Archiver** 2022

Runtime Archiver plugin for Unreal Engine. Cross-platform archiving and unarchiving directories and files.

<https://github.com/gtreshchev/RuntimeArchiver>

<https://www.fab.com/listings/9bc46d5b-b9e1-4b93-aede-194619108265>

### **Android Native** 2022

Android Native plugin for Unreal Engine that makes it easy to call Java functions via JNI. It uses template metaprogramming to automatically generate JNI signatures and handle type conversions, wrapping all JNI environment management into a single function call.

<https://github.com/gtreshchev/AndroidNative>

### **Audio Analysis Tools** 2021

Audio Analysis Tools plugin for Unreal Engine. Provides a variety of functions for analyzing audio data.

<https://github.com/gtreshchev/AudioAnalysisTools>

<https://www.fab.com/listings/8633368b-b19b-48e8-8d9d-40fddf5c7647>

### **Runtime Files Downloader** 2020

Runtime Files Downloader plugin for Unreal Engine. Downloading files over HTTP / HTTPS at runtime.

<https://github.com/gtreshchev/RuntimeFilesDownloader>

<https://www.fab.com/listings/771d5e74-3d7d-49b9-a682-7a6f7f86b94c>

## Hop Dash

Mobile hyper-casual rhythm game as an example of personal plugins, specifically RuntimeAudioImporter, AudioAnalysisTools and RuntimeFilesDownloader.

Google Play: <https://play.google.com/store/apps/details?id=hop.dash>

## Honors & awards

**UK Global Talent Visa** — Exceptional talent in digital technology

Jan 2023

Issued by TechNation UK

## Education

**Unicorn University** — Some university courses

2019 — 2020

Studying the academic foundations of software development.

**BitAM** — Private school

2015 — 2017

Basic learning of some technologies (web development, media, winforms, 3d modeling, C#, C++).