

DENIZHAN TOPRAK

GAME DEVELOPER

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SUMMARY

Computer Engineer specialized in Game Development. I have worked with multiple companies and strengthened both my technical and collaborative skills. I enjoy creating tools and robust system designs that make projects more enjoyable, efficient, and scalable.

PROFESSIONAL EXPERIENCE

Archinord Software - C++ Developer

Sep 2024 - July 2025

- Using **Unreal Engine 5** I led the development of multiple architecture visualization projects.
- Created **Engine Tools** to get live data from **AWS** servers to display live information about the residences (Such as *price, media, and other metadata*) to display to the product users and developers.
- Created project **DLC - Patch System** to update our client's projects using **AWS Cloud Systems** and **Unreal Engine 5** to reduce development time and increase user feedback.

Retter Business Services - Software Developer

July 2021 - July 2023

- Created **NodeJS backend** methods for retail web projects that are used in *login, order, cart* and payment that were run on **AWS**'s several web tools.
- Participated in various projects from the start, documenting and addressing issues. (including *Pınaronline, Jotun, Koçalem, Unishop.*)
- Used **Jira** as the **project management tool** to create, follow and test tasks for other developers.
- Developed **generic automated backend tests** mainly in **N8N**, enhancing bug detection and project stability.
- Created documentation** for the *Retter* for their custom web development tools.

Unreal Engine Tools - C++ Tool Developer

July 2021 - Active

- Developed multiple **Unreal Engine plugins** to be used by indies or studios including *interaction, ability, input, and inventory systems*.
- Built optimized and modular frameworks that are extendable and customizable for projects.
- Created data-driven, designer-friendly **network-ready**, systems and extended Epic's **Gameplay Ability System**.
- Produced full *technical documentation, tutorials, and devlogs* for all tools.
- Published, maintained, and marketed plugins on Fab Marketplace and GitHub.

Indie Game Project - Lead Developer

July 2022 - Active

- Developed a full-scale game project, building gameplay systems, AI, UI, tools, and core mechanics.
- Designed modular and scalable architecture using **C++** and **Unreal Engine** frameworks.
- Implemented custom systems (interaction, combat, inventory, tools) later extended into standalone plugins.
- Created and designed game art, including animation, sounds, materials, particles and 3D assets.
- Managed all aspects of development including planning, project management, prototyping, optimization, and technical documentation.
- Created **multiplayer** beta builds and made unit tests.
- Created a cross-platform **UI Framework** that is build on top of the Epic's **Common UI**.

SKILLS

Jan 2023 - Jun 2023

Unreal Engine 5	AWS	SCM - Git, PlasticSCM, Perfoce
Agile Development	Animation - Cascadeur	3D - Blender

EDUCATION

Bachelor of Computer Engineering	Sep 2019 - July 2023
Marmara University	

PROJECTS

Unreal Engine C++ Plugins

Some of my plugins are listed with their descriptions. Further information is in the documents.

- **Stage Interaction System:**
 - Stage based approach for gameplay interactions, where each interaction state can be handled independently and modularly in multiplayer games using **State Trees**.
- **Ability Queue Task System:**
 - Using the full extend of **Gameplay Ability System** by Epic, with additional, non-destructive, customizable **Input Queue** system that enables fluid action transitions for any type of game.
- **Modular Inventory System:**
 - Object based replicated inventory system where each item has the potential to hold other items as containers in a grid based system. Items use **Data Registry**, **GameplayTags**, **Instanced Data Fragments** in order to make modular and scalable systems.
- **Easy Skeletal Mesh Merge Async:**
 - Merges skeletal meshes to one at runtime in networked environments to optimize our players, NPC's, weapons etc. further.
- **Easy Ability Set System:**
 - Extension to **Gameplay Ability System**. By handling gameplay ability granting-clearing in bulk it gives desired friendly UI to studios with extra features: Auto Input-Ability binding, Effect Sets etc.
- **Dynamic Input System:**
 - Flexible, runtime input management system for Unreal Engine that allows developers to dynamically bind, modify, and manage input mappings during gameplay based on game context.

Software Development Projects

Some of my software development projects are listed here with their links.

- **Complaint_tr :**
 - Using **Microsoft AspNetCore** we have developed a working example complain system on web.

ADDITIONAL INFORMATION

- **Languages:** English, Turkish.
- **Programming Languages:** C++, NodeJS, Javascript, Java, C#, Python
- **Student Clubs:** Marmara University Game Development - Founder/Chairman