

SUMMARY

Game developer with a strong foundation in **Unity 2D/3D**, specializing in **gameplay mechanics**, **visual enhancement**, and **performance optimization**. Experienced in using **Shader Graph** and **URP** to build **high-fidelity, optimized** virtual scenarios for AI model training. Built a **Python-based server-client system** with **FFmpeg** for video streaming and rendering; produced diverse outputs including video renders, **OBS-synced data streams**, and **Excel reports**. Known for **resourceful, cross-disciplinary problem solving** and a **focus on clean, scalable systems**. Constantly exploring new technologies and algorithms. Passionate about building complex systems for niche audiences or contributing to large-scale game productions.

EXPERIENCES & EDUCATION

- **Unity Developer** Jan 2025-Present
TURK AI
Owned end-to-end development of the “Synthetic Visual Data Generation for AI Training” project following **direct directives from the CEO**. Created realistic 3D environments in Unity to produce synthetic video data for training computer vision models. Focused on **performance optimization** (**terrain generation, shader tuning, post-processing**) and developed **custom Unity and Python** tools for **automated data generation, stream synchronization** and **efficient output handling**.
- **Game and Application Academy Scholar** Dec 2022-Jul 2023
Google Game and Application Academy
- **Unity Developer** Oct 2022 Dec 2022
Adeline Games
Built a strong understanding of **clean code** practices, **scalable game architecture** and **design patterns**. Participated in the development of four projects, including one small and three medium-scale games, contributing to various aspects such as **gameplay mechanics, UI, and performance optimization**.
- **Bachelor of Civil Engineering** 2015-2022
Gazi University, Ankara

PROJECTS

- **Synthetic Visual Data Generation for AI Training** 2025-2025
Designed realistic virtual scenarios within the Unity engine to support computer vision model training. Utilized freely available assets from online sources to create diverse and dynamic 3D environments. The synthetic scenes were tailored to simulate real-world conditions, enabling the generation of annotated datasets for object detection and visual recognition tasks. This project aimed to improve AI models’ performance in environments where real data collection is limited or costly.
- **Two And Three-Dimensional Mesh Generation** 2019-2020
Developed a MATLAB-based application to generate both two- and three-dimensional meshes utilizing the Delaunay triangulation criterion. The code supports efficient mesh generation suitable for finite element analysis, computational fluid dynamics, and other simulation-based applications.

- **Modeling Of Aggregate Distribution In Concrete Cross Section** 2017-2018

Simulated the distribution of aggregates in a concrete cross-section using MATLAB to analyze spatial variability and material uniformity.

SKILLS

<i>Software</i>	Unity, C#, C++, MATLAB, PYTHON AUTOCAD, SAP2000
<i>Soft Skills</i>	Game Development, Game Design, Project Management, BILL OF QUANTITIES AGILE PROJECT MANAGEMENT, ENGINEERING SURVEYING

CERTIFICATIONS

Procedural Terrain Generation with Unity <i>Pete Jepsen (Udemy)</i>	Feb 2025
Unity Environment Design <i>Penny de Byl, Penny Holistic3D (Udemy)</i>	Jan 2025
Game and Application Academy Graduation Certificate <i>Google Game and Application Academy</i>	Aug 2023
Game and Application Academy Game Jam Participation Certificate <i>Google Game and Application Academy</i>	Apr 2023
Graduation Project: Project Management in the Real World To apply <i>Coursera</i>	July 2023
Agile Project Management <i>Coursera</i>	June 2023
Executing the Project: Bringing the Project to Life <i>Coursera</i>	May 2023
Project Planning: Bringing Everything Together <i>Coursera</i>	Apr 2023
Starting the Project: Stepping into the Project Successfully <i>Coursera</i>	Mar 2023
Project Management Fundamentals <i>Coursera</i>	Jan 2023

REFERENCES

References available upon request.