Carlos Requena Doña

Computer Engineer · Artificial intelligence, 3D graphics and video games

Estepona (Málaga), Spain · +34 611 45 49 44 · carlos.requena156@gmail.com
carlos-requena.github.io/Web_Personal · github.com/Carlos-Requena · LinkedIn

PROFILE

Computer Engineering graduate from the University of Jaén (2026), focused on artificial intelligence, computer graphics and game development. For my bachelor's thesis I designed and built an explainable AI module (SHAP and LRP) that runs entirely in the browser. Trilingual after a year of studying and working in Japan. Available to start immediately.

EDUCATION

Bachelor's in Computer Engineering · University of Jaén, Spain — 2021 – 2026
Thesis: *Explainability (XAI) platform for machine learning models*, integrated into Nets4Learning (SIMIDAT research group).

Exchange programme · Ritsumeikan University, Osaka, Japan — 2024 – 2025
Artificial intelligence and advanced Japanese courses.

PROJECTS

University projects, coded by me without AI assistants. Details and links on my website.

Thesis · Explainable AI in the browser — React · TypeScript · TensorFlow.js · SHAP · LRP
XAI module for the Nets4Learning education platform: visual explanations of deep learning models (tabular data, MNIST/KMNIST, object detection) computed client-side, with no backend. Owned requirements, algorithms and UI. Demo: nets4learnings.netlify.app

3D Viewer · rendering engine — C++ · OpenGL · GLSL · Assimp · ImGui
Multi-format model loading, Phong lighting, normal mapping and real-time scene editing. Solo project. github.com/Carlos-Requena/3D_Viewer

Roguelike Chibi · The Speedrunner — Unity · C#
Roguelike with procedural dungeons, Context Steering enemy AI and object pooling; first-person platformer built around movement and speed.

Metaheuristics: TSP and QAP — C++
Genetic algorithms and differential evolution for the travelling salesperson problem; greedy, local search, tabu search and multistart for quadratic assignment, with experimental analysis.

Concurrent messaging with JMS — Java · JMS
Design and implementation of asynchronous, concurrent processing with message queues.

EXPERIENCE

English and Spanish teacher · Language school, Osaka, Japan — 2024 – 2025
- Taught Japanese students entirely in Japanese, alongside the exchange programme.
- Prepared materials and adapted content to different levels and ages.

Sales assistant · El Corte Inglés, Spain — Summer 2023
Customer service during the summer season, including foreign customers in English.

SKILLS

Languages	C++, C#, Java, JavaScript / TypeScript, GLSL
Graphics & engines	OpenGL, Unity, Assimp, Dear ImGui
AI & optimization	Neural networks, explainable AI (SHAP, LRP), TensorFlow.js, metaheuristics
Web	React, Astro
Tools	Git / GitHub, Linux, Makefile, Visual Studio, VS Code, LaTeX
Spoken languages	Spanish (native) · English C1 Advanced (Cambridge) · Advanced Japanese (N2–N1; JLPT N2 in December 2026)