SANTI GONZALEZ
GRAPHICS PROGRAMMER

ABOUT

Email santi.gonzalez.cs@gmail.com
Webpage santipaprika.github.io
Residence Barcelona, Catalonia, Spain

LANGUAGES

English (fluent)
Catalan (native)
Spanish (native)

ACADEMIC BACKGROUND

M.S. Innovation and Research in Informatics
Universitat Politècnica de Catalunya | Sep 2020 - present

- Specialization in *Computer Graphics* and *Virtual Reality*.
- **Final Project**: A Framework for Real-Time Physically-Based Hair Rendering

B.S. Audiovisual Systems Engineering
Universitat Pompeu Fabra | Sep 2016 - Jul 2020

- Top 5%
- Specialization in *Computer Science* and *3D*.
- **Final project**: Augmented Reality for Barcino Roman Heritage Site through World-as-Support Paradigm.

PROFESSIONAL EXPERIENCE

Graphics Researcher
Huawei Ireland Research Center | Oct 2021 - present

- Research and implement real-time human rendering techniques.
- Contribute to O3DE.

Research Assistant
Interactive Technologies Group (UPF) | Sep 2021 - Aug 2022

- Explore, implement, and analyze techniques for real-time hair rendering.

Research Assistant
Full Body Interaction Lab (UPF) | Dec 2019 - Jul 2020

- Explore feasibility of novel AR paradigms.
- Develop AR experiences based on heritage sites.

Computer vision and AI engineer
Plyzer Technologies (internship) | Jan 2019 - Mar 2019

- Develop intelligent models (NN) that can classify images.
- Image analysis and feature extraction.

RELEVANT SKILLS

Software Engineering

C++	●●●●●	Python	●●●●○
C#	●●●●○	Lua	●●●●○
C	●●●○○	Data Structures	●●●●○

Graphics

DirectX 12	●●●●○
Vulkan	●●●○○
OpenGL	●●●○○
DirectX 11	●●●○○
Rendering/shading techniques	●●●●○
Rendering pipelines	●●●●○
GPU debugging / profiling	●●●●○
GPU ray tracing	●●●○○

Research

- Optics and light physics
- Advanced algebra

Game Engines

- O3DE
- Unity
- Unreal Engine 4

Other Tools

- CMake
- Git
- Pix / Nvidia Nsight / RenderDoc

PERSONAL EXPERIENCE

Game modder
Independent | Nov 2020 - present

- Time management addon for the game World of Warcraft.
- +2.5K downloads.