

# ANTONIO JAVIER ESPINOSA GARCÍA

## RENDERING ENGINEER



I am a rendering engineer with a year and a half of professional experience in the field, I am currently on the verge of completing my master's degree and seeking for new work opportunities. Throughout my academic and professional career, I have gained experience in computer graphics, videogame and tool development as well as computing and machine learning. With a profound passion for real-time computer graphics, I am particularly drawn to roles that involve working with 3D libraries and researching innovative rendering techniques for videogames. I believe that my versatile profile, specialized in technical fields but sensitive to the artistic ones, makes me a well-suited applicant for positions focused on developing visual solutions for users.

### CONTACT

Gender Male  
Nationality Spanish  
Birth date 07/12/1996  
Telephone +34 662 12 79 91  
Email [tonyepinosa96@gmail.com](mailto:tonyepinosa96@gmail.com)  
Postal address [Av/Alcalde de mostoles 35 1°C 28933](#)  
[Mostoles- Madrid](#)

### SKILLS

C++	<div style="width: 80%;"></div>
C#	<div style="width: 70%;"></div>
C	<div style="width: 75%;"></div>
JS	<div style="width: 75%;"></div>
Python	<div style="width: 60%;"></div>
Open/Web GL	<div style="width: 85%;"></div>
GLSL	<div style="width: 85%;"></div>
CUDA	<div style="width: 65%;"></div>
Vulkan	<div style="width: 65%;"></div>
CMake	<div style="width: 75%;"></div>
Unity	<div style="width: 85%;"></div>
Unreal	<div style="width: 70%;"></div>
3DsMax	<div style="width: 85%;"></div>
Zbrush	<div style="width: 70%;"></div>
Substance	<div style="width: 85%;"></div>
Photoshop	<div style="width: 75%;"></div>
Excel	<div style="width: 70%;"></div>

### LANGUAGES

Spanish MOTHER TONGUE  
English CAMBRIDGE C1  
Japanese 2 YEARS OF STUDY

### REFERENCES

Available on request.

### EDUCATION

23 - 24 **MASTER'S DEGREE IN COMPUTER GRAPHICS**  
REY JUAN CARLOS UNIVERSITY, MADRID

- Honours in Computer Graphics (Vulkan based project).
- Average mark of 8.7 out of 10.

19 - 23 **DEGREE IN VIDEOGAME DEVELOPMENT**  
REY JUAN CARLOS UNIVERSITY, MADRID

- Honours in subjects such as Computer Graphics, Advanced Geometry, Advanced C++, Graphical Processors (CUDA), etc.
- Honours in bachelor's thesis.
- Average mark of 8.7 out of 10.

### WORK EXPERIENCE

23 - 24 **RESEARCH FELLOW**  
REY JUAN CARLOS UNIVERSITY, MADRID

- Real-time hair rendering algorithms research and implementation enhanced by neural networks. (OpenGL/WebGL/CUDA)
- Part of the R&D European project "Virtualization and visualization of custom avatars relying on machine learning".

23 **RESEARCH ENGINEER INTERN**  
SEDDI/DESILICO, MADRID (HYBRID)

- Real-time fur rendering algorithms research and implementation in WebGL, relying on GLSL shaders.
- Implementation of a product-ready interactive WebGL-based fur rendering system for garments.
- Commercial and private 3D libraries modification (ThreeJS and in-house engine).

### ABILITIES

- Knowledge and ability to implement state of the art techniques showcased in computer graphics research papers.
- 3D libraries implementation and modification.
- Videogame and interactive applications development using IDEs or game engines (Desktop and web).
- Knowledge in physical simulation concepts and ability to implement field related tools in concurrent frameworks.
- 3D digital design using 3DsMax, Zbrush and Substance.