

Jorge Condor

PhD Candidate at USI, Switzer-

October 10, 1998

Spanish

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https://arcanous98.github.io/

Languages

Spanish

English

Italian

French

Japanese

Hard Skills

Programming Languages (C++, Python, MATLAB)

Machine learning frameworks (TF, Pytorch, JAX)

Physically based rendering, differentiable rendering (Mitsuba 3, Op-

A Computer Vision (OpenCV)

Soft Skills -

Great team working skills

Great communication skills

Hard worker and a team leader

Education

PhD

March 2022 – Present

PhD Student, IDSIA-USI The Swiss AI Lab IDSIA-USI Lugano, Switzerland PhD Student at USI Lugano, Switzerland under the supervision of Prof. Piotr Didyk. My research focuses on leveraging inverse graphics to improve applications in vision, real-time rendering and fabrication

Master

September 2020 -**February** 2022

Master of Engineering in Robotics, Graphics Universidad de Zaragoza and Computer Vision (English)

Took courses on Deep Learning, Computer Graphics, VR, Computer Vision, SLAM and Robotics. Obtained Honors in Modelling and Simulation of Appearance (PBR Computer Graphics course), where I developed a path tracer based on Nori and implemented features such as volumetric path tracing for both homogeneous and heterogeneous media and fur rendering. Got Honorable Mention (second prize) in the Rendering Contest judged by Marcos Fajardo, Matt Chiang and Wojciech Jarosz.

Master Thesis Graphics & Imaging Lab Obtained Honors in my Master Thesis, working under the supervision of Prof. Adrián Jarabo on the topic of Neural Rendering of Complex Luminaires, successfully leveraging neural networks to significantly accelerate traditional rendering pipelines. Our results were

published and presented at EGSR 2022.

Bachelor

September 2016 - July 2020

Bachelor in Electronics and Automatic Control Engineering (Spanish)

Universidad de Zaragoza

Special interest in digital and analog electronics, robotics and machine learning. Class delegate for several years. Obtained Honors in Digital Electronics, Thermodynamics, Chemistry and Fundamentals of Electronics

Bachelor Thesis

Optical Laser Technology Group, I3A A Deep Learning approach for Simultaneous Localization and Classification of Microparticles from Digital Holograms. This technology can be used towards the development of new treatments for blood and respiratory diseases as well as cancer.

2019 – 2020

Erasmus Programme in Aalto University, Finland

Took Master-level courses in the fields of AI, electronics design and robotics.

Working Experience

May 2024 -August 2024

External Research Collaborator @ Meta Nonstop Consulting (Remote) Part-time role to continue my work alongside the Monaco rendering team at Meta, working on real-time physically based rendering.

September 2023 -January 2024

Research Scientist Intern Meta Reality Labs, Zurich, Switzerland

Worked with the Monaco rendering team on real-time solutions for Physically-based rendering of humans involving hardwareaccelerated analytic ray tracing, Gaussian splatting and differentiable rendering, under the supervision of Christophe Hery and Adrián Jarabo

September 2022 -Present

Teaching Assistant, Computer Graphics and Image and Video Processing Courses

Teaching assistant for the bachelor-level Computer Graphics course and the master-level Image and Video Processing course in USI. My duties include design of practical assignments, preparation of practical exercise lessons, grading of assignments and exams and attending students questions over theory or coding.

Research Intern, Graphics and September Universidad de Zaragoza, Spain **Imaging Lab** 2021 – Developed my Master Thesis within the group funded by a competi-February tive scholarship, the results of which we published and presented in 2022 **EGSR 2022** Research Intern, Graphics and February – Universidad de Zaragoza, Spain **Imaging Lab** June 2021 Developed a volume estimation module using single RGB images in the context of an image-based perceptual material appearance editing project, collaborating with Manuel Lagunas, Johanna Delanoy, Belén Masiá and Diego Gutiérrez. Our work was published at Com-

July 2017 – September 2019 **Mathematics, Physics and Chemistry Tutor**Zaragoza, Spain
Mathematics, Physics and Chemistry tutor for baccalaureate (uni-

versity entry exams preparation) students

Publications

July 2023 Gloss-aware Color Correction for 3D Printing

puter Graphics Forum (Q1).

Proceedings of SIGGRAPH (SIGGRAPH'23). Jorge Condor, Michal

Piovarci, Bernd Bickel, Piotr Didyk

July 2022 A Learned Radiance-Field Representation for Complex

Luminaires

Eurographics Symposium of Rendering (EGSR'22). Jorge Condor,

Adrián Jarabo

January 2022 A Generative Framework for Image-based Editing of Material

Appearance using Perceptual Attributes

Computer Graphics Forum, presented at EuroGraphics 2022. Johanna Delanoy, Manuel Lagunas, Jorge Condor, Diego Gutiérrez,

Belén Masiá

October 2021 Normal Map Estimation in the Wild

Poster at **X Jornada Jóvenes Investigadores del I3A**. Jorge Condor, Manuel Lagunas, Johanna Delanoy, Belén Masiá, Diego Gutiérrez

Diplomas & Scholarships

Scholarships

2021	Beca TFM+Practicas Competitive scholarship awarding 600€/month to master thesis within a research group	Zaragoza, Spain develop your
2020	Strategic Master Scholarship Zaragoza, Spain Competitive scholarship awarding 4700€ to cover master studies	
2019	Santander Erasmus Scholarship Zaragoza, Spain Competitive scholarship awarding 500€ to cover Erasmus expenses	
2014	Aragonese Government Scholarship for a Linguistic Immersion in the English Language 1-month stay in Ontario, Canada, studying in the F.E. Granted for excellent results in high school studies	Ontario, Canada Madill School.

Diplomas

2017	Driving Licence	Zaragoza, Spain

<u>B</u> Licence

2015 Cambridge English Level 2 Certificate in ESOL International

(Advanced C1)

Overall score 199 (highest grading 202 in Speaking)

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Personal Interests

Nature & Photography Electronics

I love trekking and Nature in general, always taking my Nikon with me. Wildlife and travel photography are my personal favorites. I've done many projects throughout the years, including a 3D-printed, Raspberry-Pi based astrophotography camera, an Ambilight system for my monitor using arduino and building my own 3D-printer. Currently working on an auto-watering and plant health monitoring system.

Computer Hardware & Gaming I've always been interested in computer hardware and PC building. When gaming, my games of choice are beautifully scored indies with a strong artistic direction, such as Gris, Transistor, Ori and the Blind Forest, Limbo, Pyre, Hades...