

# Sergio Abreu García

## Software engineer

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#### **ABOUT ME**

I've been building stuff since I was little, driven by my curiosity about how things work. Since I also love video games, I decided to study Video Game Development. That gave me a robust programming basis, but I also learned about various technical topics by myself: web development, artificial intelligence, programming languages, operating systems, etc. Currently, I am mainly interested in systems programming, focusing on Rust because of its safety and speed.

I care about building reliable, efficient, sustainable software that improves the world.

#### **BEST SKILLS**

Languages

• Programming languages

Technologies

Others

English (proficient), Spanish (native), Galician (native)

Rust, C#, C++

Git, CI/CD, Unity, Godot

Systems programming, Linux, networking, multithreading, software architecture

### **EXPERIENCE**

[12/2022 - Present]

Programmer at Ao Norte – Building game prototypes in Unity and Godot

- Being the only programmer in a team of five improved my programming abilities while learning to lead the technical side of projects.
- Godot, Unity, and C#.

[11/2022 - Present]

Software engineer at Ozona Tech – Analytics tool in Rust with strict performance and security demands

• I greatly improved my programming skills, learned how big projects are built and learned to work in a team of multiple engineers.

• Rust, Windows development, multithreading, Azure DevOps, CI/CD, Docker, networking (QUIC, TCP, RabbitMQ), databases, and systems architecture.

[08/2021 - 11/2021]

#### Software engineer at Oesía - Augmented reality project for the automotive industry

- As a team of three, we developed a Unity prototype to train factory workers using hand motion tracking and augmented reality.
- Unity, C#, networking (Mirror for Unity), Manus (hand motion-tracking), and augmented reality.

#### PERSONAL PROJECTS

- 2022 Learned Rust through the official book
  - I wanted to learn better languages and programming paradigms to build more reliable and efficient software.
- 2021 Physics-based animations through reinforcement learning GitHub
  - Bachelor's degree final project Daniel Álvarez Castro and I made along.
  - We researched and developed a neural network (RL) to replicate pre-recorded animations by applying forces to a physically simulated character.
- 2020 Active Ragdolls, physics-based animations in Unity GitHub, YouTube
  - I built a physics-based animation system in Unity and made a YouTube video explaining how it works.

#### **FORMAL EDUCATION**

[2016 – 2021]

Bachelor's degree in Video Game Development – Complutense University of Madrid (Faculty of Computer Science)

[2020/2021]

Deep learning specialization (5 courses) – Coursera (certificate link)