Francisco Múrias

Experienced Technical Artist | Unreal Engine Specialist

I'm passionate about creative technologies and enjoy building procedural tools, shaders, and generative art. I've worked on AAA games and small indie projects, and I thrive on creating experiences that inspire people to imagine, explore, and immerse themselves in interactive worlds.
Whether collaborating with teams or working solo, I bring innovative ideas to life across games and beyond.

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EDUCATION

Masters in 3D Games Art (Honours)
Teesside University

2019 - 2020   *Tees Valley, England*

Highest Grade Award

Dissertation: "Development of a machine learning based interactive virtual terrain authoring pipeline for video games and 3D Media"
Topics: 3D Content creation, Procedural Art, Technical Pipelines, Material Creation, Optimization, Machine Learning.

BSc in Computer Science
University of Porto

2013 - 2018   *Porto, Portugal*

Topics: Data structures and algorithms; Discrete mathematics, programming languages and paradigms (C, C++, Java, Python, Haskell), operating systems, artificial intelligence, 3D Graphics, Games Programming

WORK EXPERIENCE

Technical Artist
Blackbird Interactive Inc

Mar 2021 - Present   *Vancouver, Canada*

Homeworld 3 - Developed and implemented several core features and systems while coordinating with different departments. Responsibilities included: content creation pipelines, shader development, post processing, real-time optimization and profiling, procedural content generation, destruction systems, VFX support, custom volumetric rendering and custom tool development.

Technical Art Instructor - Unreal Shaders
Langara Centre for Entertainment Arts

Set 2021 - Dec 2021   *Vancouver, Canada*

Designed and taught a module on Unreal Shaders to postgraduate students in the Centre for Entertainment Arts in Vancouver.

Software Development Internship
Fyde Inc

Oct 2017 - Feb 2018   *Porto, Portugal*

Responsible for creating, implementing and testing a robust animation solution for the tutorial screens of a mobile security app for iOS developed with react Native, coordinating with the in-house designer and other developers.

Co-Founder and Team Leader
Porto Graphics

Sep 2013 - Aug 2018   *Porto, Portugal*

Co-founded Porto Graphics, a group focused on promoting computer graphics knowledge sharing. Managed a team of multi disciplinary people, and organized several events, workshops and Game Jams with hundreds of participants.

3D Modeling Instructor
University of Porto

Jun 2017 - Aug 2017   *Porto, Portugal*

Instructor in 3D Modeling with Blender, for kids aged 16-18 for the summer week courses in Junior University of University of Porto.

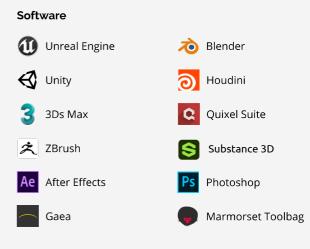### UI/UX Designer and 2D Artist
Fun Punch Games

Feb 2016 - Jun 2016   *Lisbon, Portugal*

User Interface & 2D designer for a mobile game based on android. Responsible for developing UI and menu interfaces, restructuring and rebalancing UX and 2D assets.

SKILLS

- High & Low Poly Modeling
- Procedural Content Creation
- Generative Modeling
- Materials & Shaders
- Post Processing
- Scene Lighting
- Fluid Simulations
- Pixel Art
- Real-time Performance Optimization
- Tools Development
- Machine Learning
- Web Design & Development
- VR/AR Development
- Level Design
- Environment Production
- Team Management

TOOLS

Software

- Unreal Engine
- Unity
- 3Ds Max
- ZBrush
- After Effects
- Gaea
- Blender
- Houdini
- Quixel Suite
- Substance 3D
- Photoshop
- Marmorset Toolbag

Languages and Frameworks

- Python
- Tensorflow
- ReactNative
- Javascript
- C/C++
- HLSL/GLSL

LANGUAGES

English
Native or Bilingual Proficiency

Portuguese
Native or Bilingual Proficiency

Spanish
Professional Working Proficiency

French
Elementary Proficiency