

# José Villegas | Resume

Barrio Bellas Artes, Region Metropolitana – Santiago, Chile

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Software Engineer, BA in Computer Sciences with an speciality in Computer Graphics. Wants to contribute making great games. I like developing game mechanics, new features, watching user feedback, breaking down complex technical issues and learning new things.

## Technical Skills

**Programming / Markup Languages:** C++, C#, C, JavaScript, TypeScript, HTML, CSS.

**Development Tools:** Git, SVN, Visual Studio, Visual Studio Code, Resharper.

**APIs, Libraries & Game Engines:** Unity3D, OpenGL/GLSL, STL, WPF, NodeJS, Electron, Angular.

## Experience

Professional.....

### Unity3D, C# Programmer

**Gamaga, Ltd**

*Santiago, Chile*

*Jul. 2017–Current (2 yrs 3 mos)*

Worked on multiple games, specially Operate Now : Hospital (LiveOps), implementing complex technical features, integrating new content, bug fixing, and developing external tools. Also learnt leading skills, assigning and splitting tasks for others programmers, working on estimations, desired implementations, optimal architectures and standards for the team.

### C, C++ Programmer (Remote)

**NCH Software**

*USA-Venezuela*

*May. 2017–Jul. 2017 (3 mos)*

Maintaining, improving and adding functionalities over audio and invoice management software.

### Unity3D, C# Game Developer (Remote)

**LearnSafari**

*Australia-Venezuela*

*Nov. 2015–Nov. 2016 (1 yr 2 mos)*

Level design, game logic and mechanics development for the game Learn Safari from scratch. Learn Safari is a educational game meant to teach children Spanish through different lessons with many interactive games and narrative.

Internship.....

### Game Development General Laboratory

**UCV, Computer Graphics Center**

*Caracas, Venezuela, Prof. Esmitt Ramírez*

*Apr. 2015–Aug. 2015 (5 mos)*

Writing, researching and developing theoretical and practical material for a general laboratory on game development using Unity3D.

Vocational.....

### Teacher Assistant, Operative Systems

**UCV, Faculty of Sciences**

*Caracas, Venezuela, Prof. Robinson Rivas*

*Mar. 2012–Jul. 2012 (5 mos)*

Lecturing laboratories on operative system using the C programming language, system instructions and shell commands, use of threads and processes, file systems and parallel programming.

## Education

### Licentiate in Computer Science

**Caracas, Paseo Los Ilustres**

*Central University of Venezuela (UCV), Graduated with Honors*

*2009–2016*

Major: Computer Graphics.

Academic Projects.....

**Thesis: Voxel Shading and Cone Tracing for Global Illumination**  **Computer Graphics Center**  
*UCV, Faculty of Sciences, Computer Science Department* 2016

Supervisor: Prof. Esmitt Ramírez

A real-time dynamic global illumination approach based on cone tracing for emissive, diffuse and specular surfaces utilizing voxel shading and compute shaders.

**Multi-textured Terrain Generation and Rendering**  **Computer Graphics Center**  
*UCV, Faculty of Sciences, Computer Science Department* 2015

Randomly generated terrain with height based texture mapping. Incorporated light-baking and dynamic level of detail.

**Style Transfer Functions for Volume Rendering**  **Computer Graphics Center**  
*UCV, Faculty of Sciences, Computer Science Department* 2015

Volume rendering with bilinear transfer functions and matcaps interpolation for cheap volume shading and non-realistic rendering.

## Languages


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**Spanish:** Native.

**English:** Fluent.


## Events & Conferences

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**Caracas - Venezuela | Global GameJam 2016:** A 48 hours game jam global event. Collaborated in the game "The Haunt"  using Unity3D. I worked on the game design, level design, characters movement and interactions. The Haunt is a tag-like game, where the players start as werewolves and they have to find and touch a human to transform into humans, once they transform the objective is to stay human as long as possible using the environment.

**Caracas - Venezuela | Global GameJam 2015:** Collaborated in the game "Kidz Solution"  using Unity3D along with many teammates on different roles. I worked on the game concept, artificial intelligence, interface and game mechanics. In Kidz Solutions kids have to save adults from different enemies in a post-apocalyptic world.

**Caracas - Venezuela | 5th JOINCIC 2012:** A computer science conference with many talks and courses of different topics on computer science such as web development, game development, robotics, parallel computing, data processing, etc.

**Caracas - Venezuela | CEIDEC 2012 - UCV GameDev Contest:** A scientific research and development conference with a broad range of talks from different areas such as maths, physics, biology and computer science. Developed the game "Hybris"  using Unity3D along with many teammates on different roles for the GameDev Contest, I worked mostly on artificial intelligence and game mechanics. Hibris is a god game where the player has to save humanity from imminent doom using different powers.

## Hobbies & Interests

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**TV / Animated Series:** I enjoy watching comedies, documentaries, mystery shows, comics, dramas, a bit of anime.

**Gaming:** Of course I enjoy playing video games, mostly casual games on PC or Consoles, some mobile games too. I also sometimes like to learn the game mechanics and deconstruct or think how some of them were implemented. Working on games has kinda changed the experience of playing them.

**Real Time Rendering:** Just reading about techniques to generate high quality computer graphics in real time, interesting shaders, GPU computing, graphics APIs and new possibilities within the rendering pipeline.