

# Hernaldo Jesús Henríquez Núñez

I am Computer Scientist with a focus in Computer Graphics. I consider myself a life-long learner, always seeking for chances to create, research and design new things and I'm more generalized than specialized to only one area. I try to have a service attitude, believing that helping each other out is the way to grow.

## **Professional Experience**

#### UI Game Developer | Dec 2022 - June 2024

Globant (Electronic Arts). Viña del Mar, Chile. (Remote) Worked in the Madden NFL team from EA Sports.

- Implemented UI through code using ActionScript and C++. Developed for PC and consoles with a client-server network architecture and MVC pattern. It was a large project with hundreds of developers. And the games have been played by millions of people.
- Fixed bugs
- Helped other engineers working as a team
- Communicated with other engineers, visual and game designers, project managers and producers to collaborate as a team
- Documented parts of our components library and UI workflow

#### Full Stack Developer | Mar - July 2018

Papinotas. Santiago, Chile.

Papinotas is a web app for schools. Developed a module for attendance statistics and designed a module for grading. Used Ruby on Rails and React (JavaScript).

#### Software Engineer | Oct 2016 - Feb 2018

Magnet. Santiago, Chile.

Developed and designed web apps for enterprises using Python and JavaScript (Django and Odoo ERP). Including all operations of retail and risk management.

#### Android Developer | Sep 2015 - Nov 2015

R:Solver. Santiago, Chile.

Developed an Android app that monitors mining truck load from sensors and a stock management app.

#### Software Engineering Intern | Jan - Feb 2015

GoPlaceIt. Santiago, Chile.

Created a Ruby On Rails app that generates reports with statistics about real estate using a large database with GIS as input.

#### Contact

website: https://hernaldo.me linkedin.com/in/hernaldo-henriquez

#### Education

# M. Sc., Visualization (Computer Graphics) | 2021

Texas A&M University. TX, USA.

### B. Sc. in Eng., Computer Science | 2015

Pontificia Universidad Católica de Chile. Santiago, Chile.

(Ingeniería Civil en Computación)

#### **Exchange Student, Computer Science**

**Spring 2013** 

The University of Texas at Austin. TX, USA.

#### Skills

#### **Programming Languages:**

Advanced: Python (6y)
Intermediate: C++ (2y), JavaScript (4y),
HTML (4y), ActionScript (1y)
Previous experience: Ruby (2y), Java
(1.5y), C# (1.5y), SQL (3y)

#### Software and Technologies:

Git | OpenGL | Unreal Engine 4 | Unity | Maya | Houdini | Motion Builder | GLSL | three.js | Rails | Django | React | RenderMan | PyQt | Substance Painter |Photoshop | Blender | Motion Capture (Opti Track)

#### **Operating Systems:**

Linux, Windows, Mac

#### Languages:

Spanish (Native)
English (Professional proficiency)

### Academia

#### Graduate Teaching Assistant | Sep 2019 - May 2021

Texas A&M University. TX, USA

- VIST370 (Interactive Virtual Environments) | *Jan May 2021*: Helped students with AR and VR design and development.
- VIST270 (Computation for Visualization) | *Sept Dec 2020*: Helped students learn Python, OpenGL and Linux.
- VIST305/405 (Interactive Design Studio) | *Sept 2019 May 2020*: Helped students with UI/UX design and programming for web and mobile apps.

#### Research Scholar | Jan - Mar 2016

Texas A&M University. TX, USA

- Developed an image recognition prototype for Research in Agriculture using Python, OpenCV and Android.
- Developed a voice commands recognition prototype.

#### Research Assistant | Aug - Dec 2014

Pontificia Universidad Católica de Chile. Santiago, Chile

- Assisted a team of Psychology researchers with technical issues using an Opti Track Motion Capture system, Linux and Virtual Machines.
- Used, maintained, and improved a custom 3D graphics software written in Python, OpenGL and PyQt, that displayed the animations from Motion Capture and processed the motion data.

#### Teaching Assistant | Sep - Dec 2012

Pontificia Universidad Católica de Chile. Santiago, Chile

- Helped around thirty freshman students to learn Java in a Computer Lab 3 hours per week.
- Evaluated Java projects from the students.

Engine 4 in a group of 4 people.

#### **Awards**

# Best in Graduate Research - The Vizzie Awards VIZAGOGO 27

Oct 2020

 $\label{lem:potential} \textit{Department of Visualization at Texas A\&M}$  Created a VR prototype of weather data visualization with Unreal

Short-Term Research Abroad Scholarship | Jan - Mar 2016

School of Engineering at Pontificia Universidad Católica de Chile Covered all expenses and travel for 2 months of research abroad in the US (at Texas A&M). Worked in prototype apps for research in Agriculture using image and voice recognition. Granted to about 10 students from the entire school that year.

#### Relevant Coursework

- Computer - Life Drawing Graphics - Color Theory (undergrad and - 3D Animation grad) and Modeling - Software - Virtual Reality Engineering - Human - Web Computer technologies Interaction - Data Bases - Time-Based - Pattern Media Image Recognition **Synthesis** - Distributed - Physically Systems **Based Modeling** (audited)

# Research Experience

3+ years in projects about:

- Computer Graphics
- Virtual Reality
- Motion Capture
- Computer Vision
- Machine Learning / Optimization
- Robotics

#### **Associations**

- GRIMA (Group for Machine Learning at PUC Chile)
- TAMU ACM SIGGRAPH