



Hernaldo Jesús Henríquez Núñez

Professional Experience

Software Engineer | Aug 2024 - Present

Sombra Studio

- Created a small open-source 3D game engine with Python, OpenGL and GLSL
- Created an open-source UI library for desktop apps using Python, OpenGL and GLSL

UI Software Engineer | Dec 2022 - June 2024

Globant (Electronic Arts). Viña del Mar, Chile. (Remote)

- Implemented UI 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. The games have been played by millions of people. Contributed to Madden NFL 25, Madden NFL 24 and College Football 25
- Fixed bugs
- Collaborated in team with Software Engineers, Technical Artists, UI, UX and Game Designers, Producers, QA and PMs
- Documented parts of our component library and UI workflow

Full Stack Developer | Mar - July 2018

Papinotas. Santiago, Chile.

Papinotas is a web app for schools.

- Developed a new module for attendance statistics and designed a new module for grading
- Participated in code reviews, scrum meetings and wrote unit tests
- Used Ruby on Rails and React (JavaScript)

Software Engineer | Oct 2016 - Feb 2018

Magnet. Santiago, Chile.

- Developed and designed the ERP system for a retail company including multiple operations like stock management and sales, using Odoo (Python)
- Implemented a module for financial risk management with Django and JavaScript

Android Developer | Sep 2015 - Nov 2015

R:Solver. Santiago, Chile.

- Implemented new features to an Android app for stock management and another for monitoring mining trucks

Software Engineering Intern | Jan - Feb 2015

GoPlaceIt. Santiago, Chile.

- Developed and designed a new app that generated reports about real estate using a large database with GIS information, using Ruby on Rails

Contact

 [website: https://hernaldo.me](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:

Python | C++ | JavaScript | ActionScript |
Ruby | Java | C# |

Software and Technologies:

Git | OpenGL | Unreal Engine 4 | Unity |
Maya | Houdini | Motion Builder | GLSL |
HTML | CSS | SQL | three.js | Ruby on
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.
- Created 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 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.

Awards

Best in Graduate Research - The Vizzie Awards VIZAGOGO 27

| Oct 2020

Department of Visualization at Texas A&M

Short-Term Research Abroad Scholarship | Jan - Mar 2016

School of Engineering at Pontificia Universidad Católica de Chile

Relevant Coursework

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