Alain Galvan

Graduate Graphics Researcher at Florida International University & Worship Leader at Princeton Church

Hi@alain.xyz

Summary

I'm a Graduate Research Assistant for FIU, where my research focuses on low level graphics programming.

I'm a guitarist for Princeton Church in Homestead, as well as a speaker for FIU and Miami Game Developer Meetups.

Publications

Gesture Elicitation for 3D Travel via Multi-Touch and Mid-Air Systems for Procedurally Generated Pseudo-Universe

3DUI 2017

Authors: Francisco Ortega, Alain Galvan

A user study on 3D navigation in a environment with 6 degrees of freedom on multitouch and vision based sensors.

Procedural Celestial Rendering for 3D Navigation

3DUI 2017

Authors: Alain Galvan, Francisco Ortega

A technique to render a parametric celestial skybox with the ability to light environments similar to natural color corrected images from telescopes.

Experience

PhD Graphics Research Assistant at Florida International University

June 2015 - Present (1 year 9 months)

Published several papers in the topics of 3D User Interfaces and Graphics.

Helped secure 10K in funding for a sensor based research project.

Assisted in COP 4813 Web Application Development course, teaching students TypeScript, ES2016, Node, React, lecturing and grading/giving feedback on assignments.

Built Unreal Engine 4 touch extensions, shader plugins.

Software Engineer at Florida International University

December 2014 - June 2015 (7 months)

Built Unity library for managing transitions between scenes, custom shaders/procedural geometry.

Created character models, textures, rig, animations.

Software Engineer at   AeroLocate

December 2013 - January 2015 (1 year 2 months)

Built Amazon Web Services application for managing and listing aircraft with custom Three.js fork, Angular 1.x, Node.

Education

Florida International University

Doctor of Philosophy (PhD), Computer Science

Activities and Societies: OpenHID Research Assistant, Worship Leader

Florida International University

Bachelor of Science (BS), Computer Science, 2012 - 2016

Activities and Societies: OpenHID Research Assistant, Worship Leader

Ronald W. Reagan/Doral High School

2008 - 2012

Activities and Societies: Physics Club, Choir

Honors and Awards

1st Place SudoHacks 2016

Stetson University

April 2016

We won 1st place for making an RESTful api abstraction layer on top of PeopleSoft with the addition of analytics and a React frontend.

3rd Place UHack 2016

University of Miami

February 2016

Won 3rd place for a web application that trains beginners to read music by plugging in their piano and playing in real time. Built with a custom HTML5 game engine.

Codepen.io Frontpage

Codepen.io

March 2016

I've been front paged multiple times for the following:

1. A 3D connected Stellar Cloud done with Three.js

2. A 3D Baked Codepen Logo

3. A ReactJS Hero Component

4. A Soundcloud Angular Component

5. A 3D CSS Book Element

Newgrounds Frontpage

Newgrounds.com

May 2014

   Awarded for a concept screenshot of a pixel art RPG. Received over 16K views.

Intel Excelence in Computer Science

Miami Dade College

February 2011

   Awarded for showcasing kinematics and physical programming techniques.

Volunteer Experience

Worship Leader   at   The Way Church of Miami

July 2010 - November 2013

  I served as a worship leader, performing every service on Piano, Guitar, or Violin. In addition, I educated new worshipers, and served as a technical director for the church's computer systems.

Worship Leader   at   Princeton Christian Church

September 2014 - Present

  I serve as a worshiper playing electric and acoustic guitar, in addition to serving as the backup pianist or bassist.

Speaker   at   Miami Game Developer Meetup

September 2015 - Present

  I've taught in numerous meetups with topics related to game development, including:

  - Zbrush Modeling
  - Pixel Art Design
  - Game Maker Studio Programming
  - Making Art for Games

Projects

Px

October 2016 to Present

Members:Alain Galvan

  A raster painting application designed for pixel art and digital paintings.

Coronal

January 2017 to Present

Members:Alain Galvan

  A modern 3D rendering library for the web.

Multimodal Interactive Paint

August 2016 to December 2016

Members:Alain Galvan

An painting application designed to be used with multiple devices, such as multitouch displays, Kinect, Leap motions, etc.

Ora

October 2012 to Present

Members:Alain Galvan

An indie Steam Game that was featured in the YoYo Games October 2012 Steam Workshop Competition. Received More than 2000 views and 1000 subscriptions.

Guardian

August 2010 to Present

Members:Alain Galvan

An indie RPG that was a finalist for the YoYo Games August 2010 Competition 6.

Languages

English   (Native or bilingual proficiency)

Spanish   (Native or bilingual proficiency)

Skills & Expertise

Vulkan
OpenGL
C++
JavaScript
TypeScript
WebGL
GLSL
OpenGL ES
Node.js
Python
Rust
Unreal Engine 4
C
Unity3D
C#
Java
Zbrush
Blender
Photoshop
Adobe Illustrator
Digital Painting
Three.js
Vector Illustration

3D Modeling
3D Studio Max
Pixel Art
Software Design
AngularJS
Mudbox
Linux
Game Maker Studio
Game Development
Web Development
Programming
CSS
SASS
MySQL
HTML5
HTML 5
HTML

Interests

Digital Painting, 3D Modeling, Composing Music, Performing Music, Guitar, Violin, Piano, Game
 Development, Cooking

Courses

PhD Graphics Research Assistant
Florida International University
Principles of Computer Graphics
Computational Geometry

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Linked in.

Contact Alain on LinkedIn