Orlando Aguilar Vivanco

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oa-programming.blogspot.com

Summary

Developer of videogame in Unity 3D. Programmer with expertise in computer vision, image processing and game development. Leader and designer of several projects, including two interactive books (2D and 3D)

Skills

Programming languages: C/C++, Java, C#, GLSL, BennuGD, Latex, Lua

Database: MySQL

Software: Visual Studio, Eclipse, Matlab, Office, Blender, Unity3D, Git, Gimp 2

API: OpenGl, SDL, Android SDK, Windows Phone SDK, OpenCV, Qt 4, Windows API, FMOD, Chipmunk Physics, XNA, STL

SO: Windows, Ubuntu

Languages: Spanish, English

Experience

Orly: published videogame in Google Play (4 months of development, 30 levels)   *Spring 2014*

SimiBot: designed and developed 3D Simulator for Robots in team of 3 people (C++, Qt)   *Fall 2012*
   Intern in University of Guadalajara, Mexico

Relevant knowledge

AI: Pathfinding (JPS+, A*), Pattern recognition, FSM, Terrain analysis, Steering behaviors

Physics: Collision detection and response, torque

Graphics: Shader programming, Shadows, BRDF, Reflection maps, Geometry operations

Image processing: Segmentation: Otsu, Local threshold, Voronoi; Preprocessing: Operations on Fourier; Postprocessing: Polygonal approximation, Skeletonization, corners

Others: Scripting, Bézier curves, Interpolating splines

Achievements

GPA of 4.0 in DigiPen	*Currently*
Presented paper entitled "Characterization of nanotube structures using digital-segmented images" in MICAI (International conference)	*Nov 2014*
Registration of simulator for robots	*2012*
Winner in Exposoftware 4 times: VII, VIII, IX and X	*2008-2011*

Education

M. S. in Computer Sciences	DigiPen Institute of Technology	*Expected 2016*
Engineer in Electronic and Computer Sciences Specialization in Image Processing Overall average 99.27% / 100%	Universidad de Guadalajara (Mexico)	*2013*
Windows Phone 8 certified	App University	*2013*
Videogames for Windows 8, a Microsoft Learning Workshop	App University	*2013*
Oracle Certified Professional, Java SE 6 Programmer	Oracle University	*2011*