(626) 475-6283

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Objective

Seeking a Full-Time Software Development Position

Education

University of California, Riverside

Bachelor of Science, Mechanical Engineering Minor, Computer Science: Expected December 2013

GPA 3.08 Current GPA 3.50

Projects

Super Mario Brothers clone in c/c++

May 2013-Present

Capable of loading, saving, adjusting options and soon level designing Uses OO programming, containers, memory management, and Threading

Developing a Media Player similar to iTunes using Java

September 2013-Present

Designed like iTunes but optimized for playlist management Uses multithread synchronization, object serialization

Created Multi-Directional Shooter Similar to Geometry Wars with Lua

Built using Corona SDK for iOS

Undergraduate Research on Geothermal Reservoir Modeling

Spring 2012

Large focus placed on modeling how fluids dispersed when pumped underground Wrote 36 page technical report

Independently Developing Letter Recognition Program that Runs on Matlab

Self-guided project not influenced by any other algorithm

Capable of identifying the letters written in a picture regardless of the font size

Phong Illumination Model with Phong Shading in c/c++ with openGL

Starts with triangular mesh then uses loop subdivision to create finer mesh

Can manipulate mesh by translating, rotating, adding Phong shading and shadows

3D models for college and for personal interest

Awarded top in class for creating a racecar simulation in Matlab

Other models simulated wind and gravity, jet propulsion, N-body experiments

Created a Shell Clone

Able to run commands, perform piping and io redirection, and signal handlers Implemented using POSIX C functions such as execv, dup2, and sigaction

File Transfer Protocol Server/ Client

Concurrent server utilizing POSIX sockets and pthreads

Able to send and receive data in multiple formats

Sound Programming and Composing

Composing music using FL Studio for games and for personal pleasure

Experience with JLayer, Java audio, SDL audio, Matlab audio

Skills

Languages

c++/c, Java, Python, Matlab, Lua, Arduino, Octave, Assembly Language, Bash Scripting Currently Learning: HTML 5, JavaScript

Programs

SolidWorks, Photoshop, Gimp, FL Studio, Eclipse

Sciences

Computer Vision, Machine Learning, Graphics, Mechatronics, Finite Element Methods, Thermodynamics, Fluid Mechanics, Mass and Heat Transfer, Statics, Dynamics