JAMES WHITNEY

COMPUTER & SOFTWARE ENGINEER

LANGUAGES

C / C++
PYTHON
GOLANG
JAVA
BASH

TECHNOLOGIES

REAL-TIME GRAPHICS
OPENGL
VULCAN
GLSL

DISTRIBUTED COMPUTING
OPENMP / PTHREADS
CUDA
MPI

DOCKER
NETWORKING
MYSQL
GIT

MACHINE LEARNING
DISTRIBUTED TENSORFLOW
KERAS

EMBEDDED SYSTEMS

OBJECTIVE

I am a young computer and software engineering professional, currently residing in Seattle, WA. I am seeking an entry level position in back-end development where my experience with computer graphics, containers, and/or distributed computing is most applicable.

EDUCATION

BS Computer Engineering Sep 2014 - June 2018
California Polytechnic State University, San Luis Obispo
Advanced coursework including: Advanced topics in Deep learning, Real-Time 3D Computer Graphics, Graduate level Distributed Computing, and Applied Parallel Computing. As the manager of the Mixed Reality Research lab I lead educational seminars and provided student access to emerging virtual and augmented reality hardware.

PUBLICATIONS

Co-Authored "Gluster" 2018
2018 CMMSE & The Journal of SuperComputing
Distributed Execution of communicating sequential process-style concurrency: Golang case study, A distributed computing Golang library "Gluser" that allows a user to easily distribute golang programs across a cluster.

SPECIAL PROJECTS

Gesture Armband 2018
Senior Project
My project with Cal Poly's Mixed Reality Lab was to determine if inexpensive flex sensors could be effectively used to detect and identify hand motions using machine learning techniques including neural networks and dynamic time warping.

Voyager Game Engine 2018
Real-Time Game Engine
Designed and implemented an OpenGL game engine from scratch in eight weeks with four peers. My main contribution to the engine was the integration of the Bullet3 physics engine into the project, as well as the gameplay for the demo running on the engine.

Blockchain Network Virtualization 2017-2018
Capstone: Minimega Project for Sandia National Labs
My Capstone team of five students worked with Sandia National Lab's minimega tool to simulate a custom Ethereum network, including miners and transaction traffic. My contribution was the integration of Geth to our containers and the automation of blockchain creation, mining, and the simulation of transactions on the network.

WORK EXPERIENCE

Web Developer May - Sept 2017
California Polytechnic State University
Worked with the Dean of Students office to migrate and redesign many of the websites for various on-campus programs.

Previous Retail and Sales Experience Jul - Sept 2014, Jun - Sept 2015