

EDUCATION

University of Nevada, Reno

B.S. in Computer Science and Engineering, Cum Laude, May 2014

Minor in Mathematics

Honors Thesis "Roslyn: A Tour Guide Robot"

Presidential Scholarship Recipient

COURSEWORK

Introduction to AI – Analysis of Algorithms

Software Engineering – Game Development Pipeline

Operating Systems – Computer Graphics

Programming Languages – Data Structures

Linear Algebra – Computer Engineering

PROGRAMMING LANGUAGES/SKILLS

Proficient in: C++, Linux, Git

Familiar with: HTML/CSS, JavaScript, Python, Unit Testing

Exposed to: Java, Scheme, Lisp, C#, MATLAB, GML

EMPLOYMENT

Game Development Intern, Bally Technologies Inc., Reno, NV

Oct 2013-Present

- Developed a slot machine game that will be shipped across the country
- Debugged code and provided a solution that allows for a fix for an entire class of game development
- Tested game reliability for the Operating System development team through altering game configurations
- Improved teamwork skills by working with multiple teams to finish a project

Student Intern, Evolutionary Computing Systems Laboratory, Reno, NV

Nov 2011-May 2012

- Integrated Microsoft Kinect controls and a Parrot AR Drone API for use with a PC
- Debugged the Kinect controls to create non-conflicting positional commands
- A video of this work can be seen at: <http://goo.gl/SNTncc>

EXTRACURRICULAR ACTIVITIES

Event Administrator, Nevada eSports, University of Nevada, Reno

Sept 2012-May 2014

- Adminstrated video game LAN tournaments comprised of over 120 players for the game *League of Legends*
- Assisted with club logistics and planning for multiple events each semester

PROJECTS

Senior Project/Honors Thesis "Roslyn: A Tour Guide Robot"

- Developed and implemented a clean GUI design that allows user to operate the tour guide robot easily

Introduction to Artificial Intelligence

- Implemented and visualized the path planning algorithms A* and its variant, θ^* , and visibility graph search in C++
- Implemented and visualized a particle based filter in Python, using wxWidgets for the display

Game Development

- Programmed an entire video game engine using Python and the Python-Ogre rendering system
- Created arcade style games based on quality game design principles

Data Structures

- Programmed computer vision functionality to detect the number, size, and orientation of objects in an image
- Programmed and debugged image modification techniques including: scaling, rotating, reflecting, cropping, translating, and combining two images by adding/subtracting them

Principles of Operating Systems

- Programmed matrix multiplication using threads
- Programmed a family tree visualizer using process spawning and termination

Computer Communication Networks

- Developed a cloud-based social network and messaging system