

# Emmanuel Flores

8525 Warren Vista Ave | Yucca Valley, CA 92284  
Cell: 760-427-5457 | Home: 760-228-3343 | [www.cs.ucr.edu/~eflor014](http://www.cs.ucr.edu/~eflor014)

*Targeting gameplay programming opportunity in video game development.*

## Work Experience

**Lead Programmer** for [Fenix Fire Entertainment](#), Jun 2014 - Present

- Lead programming for projects on PC, console, and mobile platforms. Focus on gameplay mechanics, procedural animation, AI, UI, local/online data management, and sync/async online multiplayer.
- Shipped two mobile titles to market.
  - Roboto (Update) - Side-scrolling platformer. Created shop for character customization, added social media features, setup back-end system to adjust dynamic gameplay parameters, and fixed/balanced gameplay mechanics.
  - Osiris Battlefield - Vehicular Shooter/FPS. Implemented spawning system and AI of all enemy creatures, designed gameplay loops, and developed leveling system for vehicles and weapons.

**Undergraduate Research Assistant** for the Riverside Graphics Lab, UCR, Jan 2014 - Jun 2014

- Video Games for Brain Fitness
  - Re-engineered existing game for alternate demographic -- used by neuroscience department at UCR in a study for memory improvement using video games.
  - Contributed in development for commercial release of brain fitness game on the App Store.

**Undergraduate Research Assistant** for the Embedded Systems Lab, UCR, Jan 2012 - Dec 2013

- Fall Detection and Energy Estimation using Cameras
  - Participated in expenditure study and managed video data and post-processing of video data for that study. Created a GUI software tool to collect head height data to be integrated into the fall detection system.
- Online Education Content Development, Studies, and Surveys
  - Developed content for an online education system to explain and reinforce computer science concepts. Developed survey websites to test the effectiveness of web-based interactive learning, conducted live research sessions, and designed scripts to parse and analyze the data collected.

**Tutor and Facilitator** for the Mindshack Center and MESA Center, COD, Jan 2010 - May 2011

- Facilitated workshops for high-level mathematics and physics courses, provided general tutoring, and worked one-on-one with students registered in learning disabilities programs.

## Education

*University of California, Riverside -- Riverside, CA*

**Bachelor of Science in Computer Engineering** with Highest Honors, June 2014

- Senior Graphics and Electronic Games Capstone Design Project
  - Led four-member team on designing and developing a runner-style game in Unity for Android/iOS. Developed high-level game logic, designed optimization algorithms, developed a software tool to design levels, created 3D models and animations, and wrote/produced game music.
- Pong Embedded Systems Project
  - Created a version of the classic Pong game using a custom-built LED matrix to display the game world and custom built arcade-style controllers for the player paddles.

*College of the Desert -- Palm Desert, CA*

**Associate of Science in Mathematics** with Highest Honors, June 2011

## Technology Summary

- Programming Languages: Proficient -- C/C++, C#, Javascript | Intermediate -- Python, Ruby
- Graphics/GameDev Software: Unity, Unreal 4, Ogre3D, OpenGL, Blender

## Awards and Honors

- HSI Undergraduate Research Award (2 quarters)
- Rotary-Alumni Award for Outstanding Academic Achievement in Mathematics 2011