

# David Mazzocco

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<b>Education</b>	University of Southern California (3.8 GPA) <b>M.S., Computer Science (Game Development)</b> <u>Coursework:</u> 3-D Computer Graphics, Physically-based Modeling, Game Engine Development, Computer Animation & Simulation	May '11
	University of California, Irvine (3.5 Major GPA) <b>B.S., Information and Computer Science</b>	June '08
<b>Skills</b>	<b><u>Programming Languages &amp; APIs</u></b> • C/C++, OpenGL, Java, JUnit, Selenium, Hibernate, Maven, C#, Qt, Python, Javascript, Unrealscript, wxWidgets, Scaleform	
	<b><u>Software and IDEs</u></b> • Visual Studio, Eclipse, SoapUI, Houdini, Unreal Engine 3, Unity 4 & 5, Jenkins CI	
<b>Experience</b>	<b><u>Programmer – The Odd Gentlemen, LLC</u></b> <i>King's Quest (PS3, PS4, Xbox 360, Xbox One, PC) – Aug '14-Dec '15</i> • Implemented various console services, such as achievements, online status and stats • Fulfilled many technical requirements for each console, such as audio output formats, resolution handling, age restrictions and calculating space requirements • Created a tool to automatically generate FaceFx animations for characters from script • Supported artists and designers with extensions to existing Unreal Engine functionality	Feb '14-Dec '15
	<i>Wayward Manor (PC, Mac) – Feb '14-July '14</i> • Added Continuous Integration and automatic builds via Jenkins CI • Designed and implemented menus and UI • Coded gameplay systems, state machines, Unity editor extensions, level logic	
	<b><u>Software Engineer – TerraGo Technologies, Inc.</u></b> • Designed and implemented a RESTful API using Jersey • Responsible for front and back-end web development (JSP, Java, Javascript) • Created automated test suites using JUnit, Selenium, and SoapUI • Connected a C++ API to Java by connecting I/O streams for message passing • Additional responsibilities included end-user documentation and handling bug reports	Jul '11-Oct '13
	<b><u>Developer (Contract) – Jirbo, Inc.</u></b> • Implemented the foundations of an unreleased iOS social game (Unity) • Wrote code for managing particle systems, game logic, asset management and UI	May '11-Jul'11
	<b><u>Research Assistant – Information Sciences Institute</u></b> • Goal was to create an interface that displayed data from an multi-agent AI system • Used Java Qt to organize and display live data • Created other tools for creating customizing simulations • Results allowed user to view experiment results in broad and detailed views	May '10-May '11
	<b><u>Level Implementation – Quicksilver Software, Inc.</u></b> <i>Star Trek: Tactical Assault (DS, PSP)</i> • Tasks were to implement game levels given a design document and scripts • Proprietary tools were used to create game logic and dialogue trees • The final product was a set of working game levels with branching storylines • Additionally performed some quality assurance testing, which included writing bug reports • Also responded to incoming bug reports from other testers	Mar '06-Aug '06
<b>Academic Projects</b>	• Created a Jello Cube using a spring system - Used shear, bend and stretch springs to stabilize simulation - Also implemented collision detection using penalty forces to keep cube within environment	Spring '10
	• Wave simulation (Computer animation) - Implemented through 3D Perlin noise (two spatial + time) - Created with Python and Houdini - Divided a grid into octaves and suboctaves, which are summed up every frame to create swells, waves and ripples - Applied cosine interpolation to achieve smooth curves and animation	Spring '11