# David Mazzocco

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| Education | University of Southern California (3.8 GPA)  ***M.S., Computer Science (Game Development)***  Coursework: 3-D Computer Graphics, Physically-based Modeling, Game Engine Development, Computer Animation & Simulation | May ‘11 |
| University of California, Irvine (3.5 Major GPA)  ***B.S., Information and Computer Science*** | June ‘08 |
| Skills | **Programming Languages & APIs**  • C/C++, OpenGL, Java, JUnit, Selenium, Hibernate, Maven, C#, Qt, Python, Javascript, Unrealscript, wxWidgets, Scaleform  **Software and IDEs**  • Visual Studio, Eclipse, SoapUI, Houdini, Unreal Engine 3, Unity 4 & 5, Jenkins CI |  |
| Experience | **Programmer – The Odd Gentlemen, LLC**  *King’s Quest (PS3, PS4, Xbox 360, Xbox One, PC) – Aug ‘14-Dec ‘15*  • 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  *Wayward Manor (PC, Mac) – Feb ’14-July ‘14*  • 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 | Feb ’14-Dec ‘15 |
| **Software Engineer – TerraGo Technologies, Inc.**  • 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 |
| **Developer (Contract) – Jirbo, Inc.**  • 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 |
| **Research Assistant – Information Sciences Institute**  • 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 |
| **Level Implementation – Quicksilver Software, Inc.**  *Star Trek: Tactical Assault (DS, PSP)*  • 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 |
| Academic  Projects | • 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 |