**CAREER OVERVIEW**

* Thirteen years experience at Lockheed Martin providing simulations to the United States and Coalition Militaries.
* Three years site lead for Lockheed Martin simulation and training application development onsite at Knolls Atomic Power Laboratory.
* Eight years experience as software development technical lead.
* One year experience as stand up instructor at technical college instructing students on software design.
* Lead the advancement of Lockheed Martin’s Interactive Multimedia Development Groups capabilities from simple computer based training to the supplying the U.S. Nuclear Navy’s most advanced, real-time 3D simulations.
* Received Lockheed Martin Global Award of Excellence. The Global Award of Excellence is only presented once a year to ten employees corporate wide.
* Proven ability to provide product demonstrations to upper management and high ranking government customers.
* Experienced with multiple programming languages along with a proven ability to quickly learn new technologies.

**EMPLOYMENT**

**Lockheed Martin 1999 – 2012**

**Software Engineer Staff / Site Lead Knolls Atomic Power Laboratories(2009 – 2012)**

* Site lead responsible for all aspects of simulation and training application development performed onsite at Knolls Atomic Power Laboratory (KAPL) in support of the Naval Nuclear Propulsion Training Program.
* Managed the full life cycle of highly complex, high risk projects from requirements gathering and architectural design through delivery and maintenance.
* Successfully interfaced with instructional designers, subject matter experts and KAPL contract administrators to develop proposals, system requirements, program scope, risks, mitigation plans, project plans, work break down structures and estimates.
* Developed and managed software development workflows to ensure work was completed efficiently.
* Trained and mentored new team members and performed quality assurance checks.
* Researched new computer hardware, software and associated equipment; managed budget and provided recommendations for procurement of assets for Lockheed Martin employees at KAPL.
* Monitored and processed timekeeping for Lockheed Martin employees at KAPL.
* Performed annual performance reviews for Lockheed Martin employees at KAPL.
* Designed and lead the development of SQL Server database to manage subject matter interdependencies in support of real-time 3D simulation development.
* Designed and developed user interface for real-time 3D nuclear engine room simulations utilizing Adobe Flash, CryEngine3, C++, Scaleform and LUA Script.
* Designed and lead development of real-time data server to support multiple projects utilizing C#.

**Software Engineer Senior / Technical Lead, Simulation Development(2001 – 2009)**

* Interfaced with Head of Foreign Military Sales to define system requirements, scope, risks and cost estimates for a suite of simulations to support Coalition Naval training on the AEGIS Weapons System.
* Designed and lead development of maintenance training simulations to support the AEGIS Antenna System, AEGIS Operational Readiness Test System (ORTS) and AEGIS Signal Processing System.
* Developed and managed software development workflow to ensure work was completed efficiently.
* Designed and Implemented configuration management plan for simulations and CBT applications.
* Developed custom interface to integrate proprietary simulations into Learning Management Systems.
* Designed and lead development of award winning proprietary Software Development Kit (SDK) for creating web based training (WBT) applications utilizing Adobe Flash, VB.Net and MySQL Server.
* Managed change control process, performed updates and issued new releases of WBT SDK.

**Software Engineer (1999 – 2001)**

* Created database in MS Access to support computer based training (CBT) application development.
* Developed custom interface for CBT applications to communicate with Learning Management Systems.
* Created multiple CBT applications utilizing proprietary SDK.

**Pennco Technical Institute 2000 – 2001**

**Computer Programming Instructor (Evening)**

* Instructed students in programming logic and software design using VB, C++, HTML and Java Script.

**PROJECT HIGHLIGHTS**

**Machinery Space Trainer (MST) 2009 – 2012**

The MST provides the ability for a Naval Nuclear Watch Team to practice routine and emergency procedures in a simulated 3d world. The MST project utilizes gaming technology to create 3d real-time simulations for the US Naval Nuclear Propulsion Program utilizing a host of software products including the CryEngine3 game engine, C++, LUA Script, 3d Studio Max, Scaleform, Adobe Photoshop and Flash.

Successfully developed and delivered MST pilot application to KAPL, Kings Bay, and Bangor Naval Facilities. The MST pilot has been in use for a year and has been demonstrated to high ranking government and military officials including members of congress.

**Flat Panel Drill Prop (FPDP) 2009 – 2012**

The FPDP application is currently in use on several ship classes in the US Nuclear Naval Fleet. The FPDP emulates digital instrumentation panels and indications allowing the drill operator the ability to simulate casualty scenarios while underway at sea. The original suite of FPDP applications were created in Adobe Flash and had significant performance issues causing the U.S. Navy to cancel further applications.

Successfully designed and presented new software architecture based on C# and WPF to address performance issues associated with Adobe Flash in the original FPDP applications. Based on the new design; received approval from U.S. Navy to upgrade existing FPDP applications to the new architecture along with scheduling the completion of FPDPs for the remaining ship classes.

**AEGIS Weapon System Simulations 2002 – 2008**

The Simulations are utilized by the U.S. and Coalition Navies to provide instruction of operational, diagnostic and maintenance procedures of the AEGIS Weapon System.

Successfully designed and lead a six year development effort to deliver a suite of simulations utilizing C++, SQL Server, Adobe Flash, 3D Studio Max and Adobe Photoshop. The simulations are in use at the Naval Surface Warfare Center in Dahlgren Virginia and in training centers in U.S. Coalition Naval Facilities around the world.

**Web Based Training (WBT) 1999 – 2009**

The WBT applications are utilized by the U.S. Navy to replace traditional instructor lead training events with computer based training applications. The SCORM compliant WBT applications are created utilizing a proprietary SDK created with Adobe Flash, MySQL Server, and Visual Basic.

Awarded the Lockheed Martin Global Award of Excellence for Designing and leading the development of the WBT SDK. The WBT SDK firmly placed Lockheed Martin’s Interactive Multimedia Development Group as the leader of WBT development for the U.S and Coalition Navies and has lead to millions of new contract sales over the last ten years.

Utilizing the WBT SDK successfully delivered hundreds of hours of full featured interactive WBT applications to U.S and Coalition Navies. The WBT applications are in use at the Naval Surface Warfare Center in Dahlgren Virginia and in training centers in U.S. Coalition Naval Facilities around the world.

**TECHNOLOGIES UTILIZED**

|  |  |  |  |
| --- | --- | --- | --- |
| C++ | C# | VB / VBA | .NET |
| Java | Flash, AS3 | SQL | CryEngine3 |
| Scaleform | SourceSafe | SharePoint | MS Project |
| MS Access | MS Excel | MS Word | LUA Script |

**EDUCATION**

Realtime Immersive Cryengine3 advanced two week onsite training 2011

Lockheed Martin 2 year mentorship, Software and Database Design 1999 -2001

Pennco Technical Institute Associate Degree Computer Programming 1999