

Jeremy A. Aker

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Skills:

Unity 3D	C#	Microsoft Visual Studio
Subversion/TortoiseSVN	CruiseControl.NET	HTML/XML
PHP	Adobe Director	SQL/MySQL
Adobe Dreamweaver	Adobe Photoshop	JavaScript
Nullsoft Scriptable Install System	ColdFusion Markup Language	Android SDK
UnrealScript	Adobe Flash	Git

Experience:

Software Engineer

InspectionXpert, Apex, NC May 2015 to June 2015

Debugged and fixed documented issues in C#.NET, JavaScript, and three.js and evaluated third party programming in three.js for InspectionXpert, in Apex, NC as a temporary contractor.

Freelance Software Engineer

Raleigh, NC; September 2015 to present

Developed features in Redemption's Guild game for Unlit Games in Cary, NC using Unity, PHP, MySQL, and Amazon Web Services. Developed a multiplayer real estate virtual property tour platform in Unity for Blind Jab Studios, Orlando, Florida. Assisted in the development of escape room games in Unity for Digital Escape Velocity, Orlando Florida. Integrated Gigya Single Sign On into Unity for Penn National Gaming, Wyomissing, PA. Assisted in developing trade show booth and travel trailer Unity applications for Red Rocket Studios, Orlando, Florida with features including picture capture from iPad camera, trade show registration, and micro site visitation tracking using PHP and MySQL. I created a Unity Editor Asset that uploads exported asset bundles to a web service and a Unity player that loads scenes and assets from those asset bundles for Transmira, Raleigh, NC.

3D Software Engineer

TEKsystems at Cisco Systems, Inc, Morrisville, NC; May 2016 to September 2016

As a contract employee for Cisco Systems through TEKsystems, I was tasked with exploring a way to view a network graph with up to 60,000 nodes and 2 million edges. I was able to demonstrate over 450,000 nodes and 3.2 million edges in Unity standalone player and over half that amount in WebGL while maintaining a frame rate of 15 frames-per-second or higher.

Senior Software Engineer

GSE Systems, 3Di Team, Cary, NC; May 2011 to September 2015

Architect and develop GSE Systems' proprietary Activ3Di software platform in Unity 3D with C# for the presentation of 3D simulation training. Create 3D simulations, virtual reality and augmented reality applications for energy industry training and skills development. Interface with 3D artists to develop optimal 3D scenes. Script training scenarios and interface with physics simulations using Unity 3D engine. Data capture real-world objects and environments for conversion to 3D virtual spaces. Administer subversion repositories, manage continuous integration server, design and implement process improvements and automate process to decrease human errors and inconsistencies. Design and implement QA procedures. Write software technical requirements and specifications.

Senior Software Engineer

Lockheed Martin, Virtual Worlds Lab (formerly 3Dsolve), Cary, NC; August 2007 to May 2011

Contribute to the design and development of proprietary software in Microsoft Visual Studio in the C# language. Oversee the technical aspects of creating 3D simulation training including interfacing with 3D artists to develop optimal 3D scenes. Scripted training scenarios using various 3D engines. Create 2D graphical software elements using Adobe Flash, Photoshop, and Dreamweaver. Research, design, and developed systems using emerging human-machine interface and augmented reality technologies.

Multimedia Developer

3Dsolve, Cary, NC; June 2005 to August 2007

Script simulation training scenarios using various 3D engines including those developed in Macromedia Director and Unreal Engine. Create 2D software simulation using Macromedia Flash. Assist in the development of 3D engines in Director.

Freelance Multimedia Developer

Raleigh, NC; March 1997 to August 2005

Integrate custom programming and various media elements, such as graphics, audio, animations, digital video, Shockwave 3D, web pages, and Adobe Acrobat, into interactive presentations, training courseware, and data-driven web sites for regional clients.

Course Designer

eHomecare.com, Ltd., Raleigh, NC; March 2001 to July 2001

Created on-line learning courses, training materials, reference manuals, and technical documentation on the use of eHomecare.com software products. Co-created an implementation plan for the introduction of eHomecare.com software to clients.

Director, Multimedia

Tech Resource Group, Inc., Raleigh, NC; January 1999 to March 2001

Responsible for managing department schedule, assigning projects to staff, and assuring quality while meeting time and monetary budgets. Train and develop staff including hiring of new staff and administering performance reviews. Maintain supply inventory. Ensure proper maintenance of equipment and specify and recommend new hardware and software. Act as a team leader providing assistance with advanced Lingo programming, debugging, and developing programming templates. Support sales staff with estimates and technical support.

Senior Multimedia Developer

Tech Resource Group, Inc. (formerly The Media Shop), Raleigh, NC; July 1997 to January 1999

Developed computer-based training lessons and multimedia presentations including advanced features and Lingo programming, integration of media elements, and design of graphical user interface. Act as team leader including managing a team of multimedia developers and the development of templates. Assure that quality standards are met.

Multimedia Developer

The Media Shop, Raleigh, NC; August 1995 to July 1997

Responsible for developing computer-based training lessons and multimedia presentations including basic to advanced features and Lingo programming, integration of media elements, and design of graphical user interface.

Production Director, Industrial Designer, Multimedia Designer

Electronic Customer Communications, Inc., Raleigh, NC; October 1994 to July 1995

Coordinated production of multimedia, industrial design, and graphic design projects. Responsible for designing surrounds for interactive multimedia kiosks and for designing graphic user interfaces for interactive multimedia programs.

Education:**Master of Industrial Design**

North Carolina State University, Raleigh, NC; August 1994

GPA: 4.0 out of 4.0

Bachelor of Environmental Design in Architecture

North Carolina State University, Raleigh, NC; December 1992

GPA: 3.421 out of 4.0 *cum laude*

Patent:**Lane, Kenneth; Aker, Jeremy; Burns, Eric; and Easter, David (2010). Virtual Shoot Wall with 3D Space and Avatars Relative to User Fire, Motion, and Gaze Direction**

Filed December 16, 2010 (In Review, Patent Application #20120156652, Serial #US 12/969,844)

Interests:**Volunteer Chase Crew**

Above and Beyond Hot Air Balloon Co., Raleigh, NC; Sept. 2001 to July 2004 and May 2009 to present

Assist aeronaut and other crew in weather assessment, wind measurement, unpacking, inflating, chasing, retrieving, and re-packing hot air balloon. Facilitate post flight ceremonies. Train new chase crew.

Blood Donor

90+ blood donations (11+ gallons)

Sprint Triathlete

Three sprint length triathlons completed