

Cole Mueller

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Experience

Multimedia Programmer II | Gromelski & Associates, Inc. (Lockheed Martin)

Jan 2019 - Present

Client: U.S. Navy (Department of Defense)

- Designs and develops interactive 3D training simulations using C# in Unity
- Creates stand-alone desktop tools and applications using Unity, Python, and JavaScript
- Automates developer workflows and version control using shell scripts and application macros
- Creates new features and tools for browser-based applications
- Develops desktop software to author S1000D schema-compliant XML
- Creates SCORM-conformant e-learning material using Lectora, Moodle, and JavaScript

Maintenance Training Simulation - Lead Programmer

Desktop Application - Unity, XML, Subversion

- Programmed readable, modern, and robust code in a large existing codebase
- Developed camera controls to view and manipulate in-game 3D objects
- Designed and implemented an interactive GUI system to emulate real-world software
- Implemented in-game actions to mirror real-world maintenance tasks on submarine hardware and software systems
- Developed a system to build in-game assets at runtime using external XML files

Flowchart Authoring Tool - Sole Developer

Desktop Application - Unity, .NET, XML

- Built a stand-alone desktop application in Unity to author, read, and publish interactive flowcharts for use in browser-based XML data viewers
- Wrote robust input, display, and data management systems in C#
- Implemented internal debug tools using .NET and WinForms
- Created a clean, responsive, and feature-rich user interface to make developing flowcharts as intuitive as possible
- Created a system to read, write, and validate flowchart XML in the S1000D schema

Training Courseware - Developer

Online Interactive Courseware - Lectora, Moodle, JavaScript

- Created multiple eLearning courses for training new employees in a medical setting
- Programmed interactivity with Lectora features and custom JavaScript
- Implemented SCORM-conformant quizzes and testing for each course
- Deployed and managed multiple courses on the Moodle learning management system

Gameplay Designer/Programmer | Root121 Games LLC

Mar 2017 - Oct 2018

- Designed and implemented core gameplay features
- Programmed mechanics, systems, and effects using C# in Unity
- Created technical art as shaders, particle systems, and simulations
- Implemented art/animation assets and developed animation systems
- Built and optimized for PC/Mac/Xbox One platforms

Groundless - Gameplay Programmer

Video Game (PC/Xbox) - Unity, Autodesk Maya, Perforce

- Designed custom input system to support four independent player inputs simultaneously in a local co-op game
- Programmed all player gameplay actions and UI functionality
- Implemented 3D character models and animations to support independent upper and lower-body animations and real-time hair physics

Web & Unity App Developer | K'NEX LPG

Apr 2017 - Sept 2017

- Developed new mobile app features using C# in Unity
- Created custom developer tools to manage web and mobile app development
- Developed web pages and features for an online storefront
- Deployed and managed Google Ad campaigns for new and existing product lines

K'NEX® 3D - Programmer

Mobile Application - Unity, Autodesk Maya, WebGL, JavaScript

- Programmed mobile features to view and interact with 3D products
- Implemented an asset pipeline to update products remotely with Unity Asset Bundles
- Published and maintained builds on Android, iOS, and Amazon platforms
- Developed a dynamic WebGL build for usage on the company website

Skills

Clearance: Active Secret (2019 - Present)

Technologies: C#, C++, HTML, CSS, JavaScript, Python, Java, Visual Basic, Command/Bash/Shell Scripting, WPF/Winforms, XML

Software: Unity, Unreal, GameMaker, Lectora, Moodle, Visual Studio, Autodesk Maya, Adobe Photoshop, Microsoft Office, Redmine, GitLab, GitHub, Bitbucket

Version Control: GIT, Subversion, Perforce

Education

Drexel University

Sept 2014 - June 2018

Bachelor of Science in Game Art and Production | Minor in Computer Science

Awards: Cum Laude, Dean's List

Vertex School

Oct 2023 - Dec 2023

Unreal Engine / Blueprint Training