Janelle Desborough
Game Developer and 3D Artist

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Education

The Art Institute of Pittsburgh: Bachelor's Degree of Science in Game Art and Design
Graduation: March 2012
Cumulative GPA: 3.8

Technical Skills

Autodesk 3ds Max	Adobe Illustrator	C++
Autodesk Maya	Adobe Premiere	UnrealScript and Kismet
Autodesk Scaleform GFx	Adobe Audition	ActionScript 3
Unreal Engine 4	Adobe Flash	Git
Unreal Engine 3	Pixologic ZBrush	Perforce
Unreal Development Kit	SideFX Houdini	Azure DevOps
Adobe Photoshop	Substance Designer	Visual Studio

Relevant Skillsets

Extensive use of Unreal Engine	UVW Unwrapping	Lighting
High / Low Polygon 3D Modeling	Texture / Material Creation	Rendering
Game Scripting / Programming	Physically Based Materials	Video Production
Game Network Replication	Rigging and Skinning	3D Printing
Technical Art	Animation	3D Scanning

Experience

CACI, Inc. - Federal *[April 2018 – Present]*
Software Developer III

Continues to further the Modeling and Simulation (M&S) team's creative capabilities by building believable scenarios, worlds, and content for Virtual RF Device Interactive Simulation Environment (ViRDISE), to include all previous responsibilities of tiers I and II Software Developer. Provides mentorship, constructive art reviews, and guidance to teammates, and serves as both Art Lead and Lead Software Developer for the M&S team. Creates 3D models, scenes, and objects for use in Unreal Engine 4 (UE4) and as visual reference material. Develops new functionality using C++ programming and Blueprint visual scripting. Creates and edits video using Adobe Premiere. Produces 3D animation using Autodesk 3ds Max. Designs project logos and graphics, develops user interfaces, generates print material, and fulfills miscellaneous multimedia and artistic needs using Autodesk 3ds Max, the Adobe Suite, and UE4.

Used game development knowledge and experience to serve as an additional Key Personnel for a successful large-scale, five-year contract re-compete. Continues to support U.S. Army Combat Capabilities Development Command's (CCDC) Command, Control, Computers, Communications, Cyber, Intelligence, Surveillance and Reconnaissance (C5ISR) Center under this task order by providing game development subject matter expertise.

Working with customers and leadership to further promote products by participating in live software demonstrations to potential new clients, VIP guests, and senior leadership.

Became familiar with source control best practices using Perforce, including the creation and maintenance of a team Depot for art content. Contributes code files to source control using Git, and documents task progress using Azure DevOps.

Participates in Science, Technology, Engineering, Art, and Math (STEAM) events to provide learning opportunities for children and students, and encourages the next generation to consider STEAM careers to include those in game development and computer science.

CACI, Inc. - Federal *[October 2015 – April 2018]*
Software Developer II

Continued to further the M&S team's creative capabilities by building believable scenarios, worlds, and content for ViRDISE using both the Unreal Development Kit (UDK) and UE4, to include all previous responsibilities of tier I Software Developer. Used Autodesk 3ds Max and Adobe Photoshop to create additional 3D models for use in virtual worlds and to be used as visual reference material. Created and edited video using Adobe Premiere. Produced 3D animation using Autodesk 3ds Max. Maintained and distributed large rendering jobs using Autodesk Backburner and a network of several desktop computers and servers. Designed project logos, graphics, and print material using Adobe Illustrator. Developed user interfaces for UDK using Adobe Flash and Autodesk Scaleform GFx, and for C# applications using Adobe Photoshop and Adobe Illustrator.

Facilitated the migration of ViRDISE from UDK to the newly released UE4. This included translating all UnrealScript and Kismet features to C++ and Blueprints, adjusting all 3D models and environments to fit the new realistic world scale, and recreating all materials, effects, animations, user interfaces, and miscellaneous content to be compatible with UE4's upgraded systems, such as the improved Material Graph built upon the industry standard Physically Based Rendering methodology, Animation Blueprints, and Unreal Motion Graphics, all while following new conventions such as differing file formats and new rendering pipelines. This upgrade granted the M&S team access to the latest gaming technology, full source code, and more flexibility in writing custom functions and integrating with external engineering hardware and software. Required all knowledge of C++ and UE4 to be self-taught as a new discipline.

Received instruction in 3D X-ray computed tomography use and procedures. Used X-ray equipment to capture scans of objects, and specialized software to process the data into clean 2D images and animated videos.

Gained experience in both industry and consumer grade 3D scanning systems. Processed point-cloud data into surface meshes using specialized 3D repair and stitching software.

CACI, Inc. - Federal *[August 2012 – October 2015]*
Software Developer I

Served as one of the original M&S team members to begin development of what would become known as ViRDISE. Provided video game development, 3D design, and artistic expertise. Worked with engineers to translate highly technical concepts into accurate visual representations, and used video game theory and techniques to create interactive simulations utilizing UDK. Responsible for all aspects of game creation, to include but not limited to 3D asset creation and animation using Autodesk 3ds Max, texturing using Adobe Photoshop, scripting using UnrealScript and Kismet, visual effect development using Cascade, and audio production using Adobe Audition. Was also available to assist with miscellaneous multimedia and artistic needs, such as video production using Adobe Premiere, feature animation using Autodesk 3ds Max, and print material using Adobe Photoshop and Adobe Illustrator. Assisted in expanding existing and adding new graphical capabilities to various projects within CACI and to outside customers. Offered insight into new possibilities that may make use of video game and digital animation technology.

Designed and created worlds using UDK representing both real and imagined locations for the initial prototype of ViRDISE. Imported actual terrain data, and then applied digital sculpting and painting skills to further develop and refine the worlds using the Terrain, Foliage, and Material editors within UDK. Generated 3D meshes using Autodesk 3ds Max to populate the worlds. Created animation rigs and interactivity for characters and vehicles. Created visual and audio effects such as particle systems, post process chains, and ambient noise using tools within UDK to include Cascade, the Material editor, and the Sound editor.

Created new and additional functionality for ViRDISE using UnrealScript and Kismet in UDK. Tested and debugged scripts both in standalone and networked modes to ensure proper replication of networked play.

Produced several multimedia features to include video production in Adobe Premiere and 3D animation in Autodesk 3ds Max. This media continues to be used by the C5ISR Center and CACI leadership as demonstration material for new employees, visitors, potential customers, and VIP guests.

The Art Institute of Pittsburgh – *Destruction Grand Prix (DGPX)* *[July 2011 – June 2012]*
Character / Vehicle Team Lead, Vehicle Modeler, and Vehicle Scripter
Created one of three vehicles in a destructible racing game utilizing UDK. Modeled, rigged, skinned, and textured the vehicle using Autodesk 3ds Max, Adobe Photoshop, and Pixologic ZBrush. Used UnrealScript to build a custom interactive vehicle class. Trained teammates in scripting methods and authored a reference guide for UDK vehicle creation for course use. Acted as lead for the Vehicle Team, and interfaced between the Vehicle and Engine teams for proper integration of assets. Continued to support the project as a personal endeavor after course conclusion and graduation in order to assist the next set of students and see the project through to completion.

The Art Institute of Pittsburgh – Advanced Level Design *[October 2010 – December 2010]*
Production Lead and Environmental Modeler
Modeled and textured 3D assets for use in a custom map for *Unreal Tournament 3* using Autodesk 3ds Max, Adobe Photoshop, and Unreal Engine 3 as part of a team-based project. Took on a leading role by creating and managing schedules and documentation for the team, and ensured the project was on track for completion.

Awards and Honors

The Art Institute of Pittsburgh's Game Art and Design Best of Show *[March 2012]*
Student nominated by industry guests and AIP staff as having the strongest portfolio for the Game Art and Design program during the March 2012 Portfolio Review graduation ceremony.

ESA Foundation Computer and Video Game Scholarship *[August 2011]*
Awarded to 15 women and minority college students annually within the US who are seeking careers in computer and video game arts.

Game Art and Design Student of the Quarter *[October 2010]*
Awarded by AIP staff to one student in the Game Art and Design program per quarter as recognition for outstanding performance.

Inductee of the National Technical Honor Society *[March 2010]*
Membership granted to nominated students enrolled in a career technical program who maintain a minimum GPA of 3.0 throughout their academic career.

The Art Institute of Pittsburgh's President's List *[October 2010 – July 2011]*
Recognition granted to students who achieve a GPA of 4.0 for the quarter.

The Art Institute of Pittsburgh's Dean's List *[October 2008 – March 2012]*
Recognition granted to students who achieve a GPA of 3.7 through 3.9 for the quarter.

Perfect Attendance at The Art Institute of Pittsburgh *[October 2008 – March 2012]*
Recognition granted at graduation to students who achieved full attendance throughout their academic career.

- References Available Upon Request -