

Maria Alejandra Montenegro

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Purpose	Full Time Position in the field of Interactive and Creative Technology as a Developer.		
Education	Carnegie Mellon University , Entertainment Technology Center (ETC) , Pittsburgh, PA		May 2015
	Master of Entertainment Technology	GPA: 3.74/4.0	
	Rensselaer Polytechnic Institute, Troy, NY		Dec. 2012
	Dual Degree: B.S. Computer Science and B.S. Electronic Media, Art & Communication	GPA: 3.5/4.0	
Skills	Frameworks: OpenFrameworks, Unity3D Programming Languages : C++, C#, C, Python, JavaScript, HTML5, CSS, SQL, OpenGL, .Net, PHP Hardware Inputs: Arduino, Microsoft Kinect (v1, v2), Oculus Rift, Leap Motion, PS Move Design Programs: Autodesk, Dreamweaver, Photoshop, Illustrator, InDesign, Flash, After Effects		
Relevant Experience	Yahoo Software Engineer - Full time		Present
	Video team / android mobile development.		
	Kinesis Studio - Lead Engineer Internship		Summer 2014
	Unity 3D developer of interactive floors with IR cameras (OpenCV) and Kinect 2. <ul style="list-style-type: none">Developed blob detection and ID tracking algorithm, including when blobs merge together.Present in whole development cycle (beginning to end).End product were 2 installations in Las Vegas for client.		
	Interactive Developer (Freelance) - www.Fusion-Sky.com		May. 2012 - Present
	With the use of OpenFrameworks, OpenGL and unique platforms like: <ul style="list-style-type: none">Microsoft Kinect, Motion Capture, Oculus Rift, Leap MotionArduino, Touch Screens, LightingProjection Mapping, Pepper's Ghost		
	Smoke Ring Simulation - RPI Independent Research Study (OpenGL, C++)		Dec. 2012
	A smoke ring rendering simulation with the use of photon mapping and an octree data structure.		
Projects	MoleCap - Motion Capture & VR experience - Designer / Programmer		Spring 2015
	Main Purpose: Push the limits of VR and Motion Capture technology. Focused on researching new ways to combine technology with rapid prototyping and innovating design.		
	Palmistry Ball - Projection Mapping / Leap Motion		Spring 2015
	An interactive game that lives in your hand. Uses Leap Motion to track the hand and 3D projection mapping to make the users had the canvas.		
	Marioneta - Kinect 2 experience - Lead Developer		Fall 2014
	An interactive puppet gesture recognition exhibit for the Children Museum of Pittsburgh. Research paper published by IEEE VR15.		
	Questyinz - Backend Programmer / Co-producer		Spring 2014
	An educational game to promote reading for Allegheny County Library Association. <ul style="list-style-type: none">Real time multiplayer game focused on social interactions to promote reading in children K-5.Live since June 2014.		
	Building Virtual Worlds - Programmer		Fall 2013
	Total of five two-week fast game prototypes. <ul style="list-style-type: none">Maze of Hearts: Kinect game - take pieces of heart back to robot's heart - human shadow.Muzilla: Leap Motion DJ - environment reacts to music - FFT analyzer.The Last Egg: A six PS Move multiplayer team game - IndieCade Finalist 2014.		
Related Courses	Applied Machine Learning		
	Emphasized an understanding of machine learning algorithms and how to apply them in real world problems to learn and prove hypotheses.		
	Advanced Computer Graphics		
	OpenGL simulations in topics like cloth, fluids, and rendering techniques like raytracing, radiosity, and photon mapping.		
	Art & Code & Interactivity		
	Create interactive experiences and artwork with OpenFrameworks and various hardware inputs.		
Activities Publications	<i>Published Paper: Marioneta Virtual Puppeteer Experience, Virtual Reality (VR), 2015 IEEE.</i>		
	<i>Mastering Leap Motion</i> Reviewer - Packtpub.		
	SIGGRAPH 2012 Student Volunteer.		
	World Traveler and Cultural Explorer.		