

# Maria Alejandra Montenegro

ThinkMariale@gmail.com - www.ThinkMariale.com

USA: +1 (518) 860-2199

**Purpose** Push the bounds of technology and experiences with creative development

## Relevant Experience

- Magic Leap Inc. - Lead User Interaction Engineer** (Full time) Present  
Interactive Experiences and Gaming with the use of computer vision and AI in mix reality.  
- lead prototype development for future mixed reality  
- Develop prototypes for our deep learning team to test our algorithms  
- Train deep models to enhance interactions and experiences
- Yahoo! - Software Engineer** (Full time) 2015-2016  
Video team / android mobile development. Focused on live streaming algorithms.
- Kinesis Studio - Lead Engineer** (Internship) Summer 2014  
Unity 3D developer of interactive floors with IR cameras (OpenCV) and Kinect 2.  
• 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) May. 2012 - Present  
With the use of ARKit, OpenFrameworks, OpenGL, OpenCV and unique platforms like:  
• Microsoft Kinect, Motion Capture, Oculus Rift, Leap Motion  
• Arduino, Touch Screens, Lighting  
• Projection Mapping, Pepper's Ghost  
• Mixed Reality and Virtual Reality Explorations

## Skills

**Frameworks:** OpenFrameworks, Unity3D, ARKit, ARCore, React/React Native, PyTorch  
**Programming Languages:** C++, C#, C, Python, OpenCV, OpenGL, JavaScript, HTML5, CSS, SQL, PHP  
**Hardware Inputs:** Arduino, Microsoft Kinect (v1, v2, v3), Oculus Rift, Leap Motion, PS Move  
**Design Programs:** Figma, Photoshop, Illustrator, InDesign,

## Released Prototypes

- BeClose** - Co-founder - www.BeClose.co
- BM** - Arduino - Lead Developer  
Burning man lover, each year I create an LED installation unique for each burn  
- multiple sensors ... lot of stuff
- Remnant** - ARKit - Lead Developer  
An interactive dinner story told through mixed reality. Installed in an immersive one night experience in Copenhagen.
- Palmistry Ball** - Projection Mapping / Leap Motion - Lead Developer  
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  
An interactive puppet gesture recognition exhibit for the Children Museum of Pittsburgh.  
Research paper accepted by IEEE VR15.
- Maze of Hearts:** Kinect game - take pieces of heart back to robot's heart - human shadow.  
- Experimental Games Finalist GDC 2014
- The Last Egg:** A six PS Move multiplayer team game  
- IndieCade Finalist 2014

## 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

## Activities Publications

*Published Paper: Marioneta Virtual Puppeteer Experience, VR 2015 IEEE*  
*Mastering Leap Motion* Reviewer - Packtpub.  
World Traveler and Cultural Explorer.