

# Luming Ma

## Education

- 2015–present **Ph.D**, *Computer Science*, University of Houston, Houston, TX.  
2006–2008 **M.S.**, *Computer Science*, University of Bridgeport, Bridgeport, CT.  
2002–2006 **B.S.**, *Software Engineering*, Northeastern University, Shenyang, China.

## Research Experience

- 2015–present **Computer Graphics & Interactive Media Lab**, *University of Houston*.  
○ Real-time automatic facial performance capture and manipulation from RGB video.

## Work Experience

- 2019.5–  
2019.8 **Software Engineer Intern**, *Facebook*, Menlo Park, CA.  
Core Tech Hands and Interaction Tracking Eng  
○ Developed a temporal vision based method to automatically detect hand-surface touching from monochrome video.
- 2012–2015 **Lead Software Engineer**, *BlueTorchSoft Ltd*, Shenyang, China.  
○ Developed 3D multi-player action game and dancing game on mobile platforms and web browsers.
- 2011–2012 **Senior Software Engineer**, *Neusoft Corporation*, Shenyang, China.  
○ Developed cloud health management and diagnosis system for [www.xikang.com](http://www.xikang.com).
- 2010–2011 **Senior Software Engineer**, *HalfQuest Technology Ltd*, Beijing, China.  
○ Developed 2.5D business simulation flash game on Facebook.
- 2008–2010 **Software Engineer**, *TournamentOne Corp*, Stamford, CT.  
○ Developed several Flash desktop and online games including horse racing, poker, keno and slot games.

## Skills

Coding C++, CUDA, Python, C#, Java, Actionscript

Tools OpenGL, OpenCV, DirectX, Pytorch, Tensorflow, Unity3D, Maya, Flash

## Awards

- 2019 **Best PhD Student**, *Department of Computer Science*, University of Houston.

## Publications

- [1] Luming Ma and Zhigang Deng. “Real-time Face Video Swapping From A Single Portrait”. In: *Proceeding of ACM SIGGRAPH Symposium on Interactive 3D Graphics and Games (I3D)*. San Francisco, CA, May 2020, 10 pages.
- [2] Christopher Connaboy et al. “Intersession Reliability and Within-Session Stability of a Novel Perception-Action Coupling Task”. In: *Aerospace Medicine and Human Performance* 90.2 (2019), pp. 77–83.

- [3] Luming Ma and Zhigang Deng. “Real-Time Facial Expression Transformation for Monocular RGB Video”. In: *Computer Graphics Forum* 38.1 (2019), pp. 470–481.
- [4] Luming Ma and Zhigang Deng. “Real-time Hierarchical Facial Performance Capture”. In: *Proceeding of ACM SIGGRAPH Symposium on Interactive 3D Graphics and Games (I3D)*. Montreal, QC, Canada, May 2019, 10 pages.