# Luming Ma

# Objective

Seeking for Summer Intern position as Software Engineer/Researcher

#### 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.

- Developed real-time system to capture albedo, lighing and wrinkle-level geometry of facial performance on RGB video via shape-from-shading optimization.
- Developed automatic real-time method to photo-realistically transform facial expressions from RGB video using Cycle-GAN model.
- Developing automatic real-time method to photo-realistically swap the face from a single source image to a target video of a different identity.
- Developing automatic method to generate photo-realistic face wrinkles given facial expression parameters using deep generative models.

## Work Experience

- 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.
- 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, Tensorflow, Unity3D, Maya, Flash

#### Publications

- [1] Luming Ma and Zhigang Deng. "Real-time Hierarchical Facial Performance Capture". In: Symposium on Interactive 3D Graphics and Games (I3D) (2019).
- [2] Luming Ma and Zhigang Deng. "Real-Time Facial Expression Transformation for Monocular RGB Video". In: Computer Graphcis Forum (2018).