

## Lele Chen

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EDUCATION	University of Rochester	September 2018
	Ph.D Candidate in Computer Science	Supervisor: Prof. Chenliang Xu
	University of Rochester	September 2016 - Present
	M.S. in Computer Science	GPA: 3.71/4.0
	University of Reutlingen	March 2015–October 2015
	Exchange student in Informatics	GPA: 1.68/1.0
	Donghua University	2012 - 2016
	B.S. in Computer Science	GPA: 82.3/100 (Math: 90.2/100)

**RESEARCH INTERESTS**    **Visual understanding:** Video/image segmentation, activity recognition, and multi-modal vision-and-x modeling.

- PUBLICATIONS**
- **L. Chen**, Z. Li, R. Maddox, Z. Duan and C. Xu. 'Lip movements generation at a glance'. *ECCV*, 2018
  - **L. Chen**, E. Eskimez, Z. Li, Z. Duan, C. Xu, R.K. Maddox. 'Toward a visual assistive listening device: Real-time synthesis of a virtual talking face from acoustic speech using deep neural networks'. *The Journal of the Acoustical Society of America*, 2018
  - **L. Chen**, Y. Wu, A. M. DSouza, A. Z. Abidin, C. Xu and A. Wismller. 'MRI Tumor Segmentation with Densely Connected 3D CNN'. In *SPIE Conference on Medical Imaging*, 2018 (oral presentation)
  - **L. Chen**, S. Srivastava, Z. Duan and C. Xu. 'Deep Cross-Modal Audio-Visual Generation'. In *Proc. of ACM International Conference on Multimedia Thematic Workshops*, 2017

HONORS & AWARDS	Scholarship by University of Rochester (30% of tuition)	2016
	Bronze Medal of Mathematical Contest in Modeling of Shanghai	2014
	Scholarship for Academic Excellence	2013
	Jinbao Scholarship for Top 10 Students	2013
	Bronze Medal of ACM Contest of Donghua University	2013

## SELECTED PROJECTS

### Lip movements generation at a glance

October 2017

**Advisor:** Prof. Ross Maddox, Prof. Zhiyao Duan, Prof. Chenliang Xu

Explored the best modeling of the audio-visual correlations in building and training a lip-movement generator network. Specifically, we devised novel methods to fuse audio and image embeddings in generating multiple lip images and propose a novel correlation loss to synchronize lip changes and speech changes. demo video can be found in [https://youtu.be/7IX\\_sIL5v0c](https://youtu.be/7IX_sIL5v0c)

### MRI tumor segmentation with densely connected 3D CNN

July 2017

**Advisor:** Prof. Axel W. E. Wismüller, Prof. Chenliang Xu

Introduced a new approach of segmenting subregions in gliomas using densely connected 3D convolutional networks. Code has been released in <https://github.com/lelechen63/MRI-tumor-segmentation-Brats>

### Video segmentation considering actor and action (on going)

August 2017

**Advisor:** Prof. Chenliang Xu

Built a hierarchical model to segment video sequences by sharing useful information among different actors and actions.

### Region of Interest Detection in satellite Images

April 2017

**Advisor:** Prof. Jiebo Luo

Developed an application to automatically detect 'hidden' smelters on Google Satellite Map using transfer learning.

### Deep Cross-Modal Audio-Visual Generation

January-April 2017

**Advisor:** Prof. Chenliang Xu

Designed conditional generative adversarial networks to achieve cross-modal audio-visual generation of musical performances.

## EXPERIENCE

### Vision Research Scientist(Intern)

May 2018 - Present

JD.com, USA

### Research Assistant

September 2017 - May 2018

University of Rochester, USA

### Teaching Assistant

July 2017 - October 2017

University of Rochester, USA

### Vision Science Engineer (Research Intern)

June 2017 - October 2017

VisualDX, USA

### Software Engineering trainee

May 2015–August 2015

Shaumal, China

## TECHNICAL SKILLS

### Master Courses

Advanced Topics in Computer Vision, Deep learning and Graphical models, Machine learning (audit), Data mining, Machine vision

### Programming Languages

Proficient in: Python, Lua, C++, MATLAB

Familiar with: Ruby, C, R, CUDA, SQL

### Software Skills

Proficient in: Pytorch, Torch, Keras, MXNet, OpenCV, Omigraffle

Familiar with: Caffe, Tensorflow