# KEYU LONG

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## EDUCATION

**University of Toronto**, Department of Computer Science — Toronto, ON
*Master of Science in Applied Computing (MScAC)* — Sep 2019 - Dec 2020
- **Courses**: Perception for Robotics; Parallel and Distributed Computing; Private Data Analysis

**University of Chinese Academy of Sciences** — Beijing, China
*Bachelor of Math and Applied Math, Merit Student Award(2018)* — Sep 2014 - Jun 2018

## PROFESSIONAL EXPERIENCES

**SenseTime, R&D Dept.** — Beijing, China
*Computer Vision Research Intern* — Aug 2018 - Apr 2019
- Research the unsupervised image classification algorithm based on AutoEncoder and clustering methods on ImageNet.
- Apply to the face dataset to be the pipeline for processing monitoring data.
- Published a paper on 2019 ICCV Conference (as co-first author).

## PUBLICATION

- Jianlong Wu*, **Keyu Long***, Fei Wang, Chen Qian, Cheng Li, Zhouchen Lin. "Deep Comprehensive Correlation Mining For Image Clustering". ICCV 2019
- Shuang Yang, Yuanhang Zhang, Dalu Feng, Mingmin Yang, Chenhao Wang, Jingyun Xiao, **Keyu Long**, Shiguang Shan and Xilin Chen. "LRW-1000: A Naturally-Distributed Large-Scale Benchmark for Lip Reading in the Wild". FG 2019

## RESEARCH EXPERIENCES

**Researching Lip-reading based on Deep Learning** — ICT, CAS
*Undergraduate RA under Prof. Shiguang Shan* — May 2017 - Sep 2017
- Video classification using P3D and PreRNN, investigated 2D-3D combination methods with attention mechanism.
- Contributed to the largest lip-reading dataset in China, published a paper on FG 2019 IEEE.

**Mathematical Principles in GAN** — UCAS
*Bachelor thesis under Prof. Zhiming Ma* — Jan 2018 - Jun 2018
- Researched characteristics of GAN and wGAN, including convergence, Lipschitz limitation, and error estimation. Determined the estimated error of the Lipschitz limitation in neural network.
- Thesis was awarded "Excellent Bachelor's Thesis".

**RoboMaster National Robot Contest** — Institute of Automation
- Processed robotic vision signal. Got familiar with OpenCV, robotic control theories, and hardware functions
- Got third prize in RoboMaster national college students robot contest, 2016

## SKILLS

**Programming languages**: Python, JavaScript, Matlab, C/C++, Java
**Tools**: PyTorch, TensorFlow, numerical libraries, git, OpenCV, Spark, LaTeX
**Languages:** English, Chinese