

# Luxin Zhang

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## EDUCATION

### Carnegie Mellon University

School of Computer Science

M.S. in Computer Vision

Dec 2019 (Expected) | Pittsburgh, PA

- Current Courses: Machine Learning, Mathematical Fundamentals for Robotics, Computer Vision

### Peking University

B.S. in Intelligence Science

Jun 2018 | Beijing, China

- GPA: 3.56 / 4.00 (top 20%)
- Selected Coursework:
  - **AI:** Intro to Pattern Recognition, Intro to Artificial Intelligence, Machine Learning, Intro to Intelligent Robots, Human-Computer Interaction, Intelligent Information System
  - **Math:** Probability Theory and Statistics, Signals and Systems, Information Theory

## AWARDS &

## ACHIEVEMENTS

- TA in Introduction to Computer Systems at Peking University
- Vice-Minister of Literature and Art Department in the Student Union of EECS at Peking University
- Wu Si Scholarship (top 10%), Peking University
- Excellent Research Award, Peking University

## SKILLS

**Programming:** Python, C/C++, C#,

MATLAB, SQL, HTML/CSS, JavaScript

**Platforms & Tools:** Keras, TensorFlow, Linux, Git,  $\LaTeX$

**Interests:** Music, Dancing, Movies, Traveling

## LINKS

🌐 [github.com/lucinezhang](https://github.com/lucinezhang)

in [www.linkedin.com/in/luxin-zhang-cmu](https://www.linkedin.com/in/luxin-zhang-cmu)

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## OBJECTIVE

Looking for a software engineering or research internship for summer 2019

## EMPLOYMENT

### Microsoft Research Asia | Software Engineering Intern

Sep 2017 – Feb 2018 | Beijing, China

#### Maintenance and Development of LUIS

- Worked on a team to maintain and develop LUIS, a machine learning based service to help users build applications to do language understanding tasks
  - Fixed several bugs for LUIS project
  - Developed a new built-in model to recognize number ranges in texts in Chinese and English
  - Improved the robustness of several existing built-in models by adding new features
- Skills:** C#, Regular Expression, Git

## RESEARCH & PROJECTS

### University of Texas at Austin | Research Assistant to Prof. Dana Ballard

Jul 2017 – May 2018 | Austin, TX

#### Modeling Human Attention for Deep Imitation Learning

- Built a multi-channel deep neural network to predict human attention from the eye tracking data collected from human experts playing Atari video games, obtained a high AUC of 0.96
  - Conducted experiments to show that the learned human attention model could help computers imitate humans and play games better
- Skills:** Deep Learning, Keras, TensorFlow, Python, GPU Clusters

### Peking University

2016 – 2017 | Beijing, China

#### Static and Dynamic Sign Language Recognition

- Implemented static sign language recognition using CNN, obtained 90% accuracy on 6 categories.
  - Achieved an accuracy of 91% on 10 categories, by using a two-stream 3D-CNN on dynamic sign language recognition.
  - Implemented dynamic sign language recognition using HMM, achieved 90% accuracy on 6 categories.
- Skills:** Deep Learning, Machine Learning, Hand Gesture Recognition, Keras, Python, C++

#### Text Effects Transfer

- Improved the algorithm to generate target stylized image  $T'$  by transferring the style in source stylized image  $S'$  to target text image  $T$ , without the presence of source text image  $S$
  - Implemented KNN clustering based on pixels' feature vectors to recognize the source text from  $S'$
- Skills:** Image Style Transfer, Image Segmentation, MATLAB

## PUBLICATIONS

- **L. Zhang**, R. Zhang, Z. Liu, M. Hayhoe and D. Ballard. Learning Attention Model from Human for Visuomotor Tasks, **AAAI 2018 Student Abstract and Poster Program**. [pdf]
- R. Zhang, Z. Liu, **L. Zhang**, J. Whritner, K. Muller, M. Hayhoe and D. Ballard. AGIL: Learning Attention from Human for Visuomotor Tasks, **ECCV 2018**. [pdf]
- R. Zhang, Z. Liu, **L. Zhang**, K. Muller, M. Hayhoe and D. Ballard. Visual Attention Guided Deep Imitation Learning, **NIPS 2017 CIAI Workshop**. [pdf]