# 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
- PKU Wu Si Scholarship (top 10%)
- PKU Excellent Research Award

# **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
in www.linkedin.com/in/luxin-zhang-cmu
• Lucine Zhang

#### **OBJECTIVE**

Looking for a software engineering or research internship for summer 2019

#### **EMPLOYMENT**

#### Microsoft | 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

# **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 we collected from human experts playing Atari video games, obtained a high AUC of 0.96
- Conducted experiments to show that our learned human attention model could help computer imitate humans and play games better
- Skills: Deep Learning, Keras, TensorFlow, Python, GPU Clusters

#### **Peking University** | Research Assistant

2016 - 2017 | Beijing, China

#### **Text Effects Transfer**

- Improved the algorithm to generate target stylized image T' by using only a source stylized image S' and a target text image T, without using source text image S
- Implemented different image segmentation methods to recognize the source text from S', such as KNN clustering based on pixels' feature vectors and level set segmentation based on shape priors
- Skills: Image Style Transfer, Image Segmentation, MATLAB

#### **Cultural Heritage Protection Based on Virtual Reality**

- Implemented gesture recognition for user interaction of the display system using HMM
- Achieved an accuracy of 96% on recognizing gestures
- Skills: Machine Learning, Gesture Recognition, C++

## 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*.
- 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*.
- R. Zhang, Z. Liu, **L. Zhang**, K. Muller, M. Hayhoe and D. Ballard. Visual Attention Guided Deep Imitation Learning, **NIPS 2017 Cognitively Informed Artificial Intelligence workshop**.