# **Zhan Cheng**

https://enchanted23.github.io cz23@mail.ustc.edu.cn



#### **Education**

# UNIVERSITY OF SCIENCE AND TECHNOLOGY OF CHINA

Hefei, China 2014 - now

Undergraduate

- Major: Computer Science and Technology

### **Research Experiences**

# **English Chatbot Completion Using HRED Model**

University of Waterloo *Jun.* 2017 - Aug. 2017

Summer Researcher

- Mentor: Prof. Ming Li | https://cs.uwaterloo.ca/~mli/
- Description:
  - 1. Built and improved the Hierarchical Recurrent Encoder-Decoder (HRED) model for English chatbot referring to some papers and code.
  - 2. Collected tens of millions of data from different sources like twitter, reddit, movie dialog, etc to train the RNN model.
  - 3. Modified the code and the training sets repeatedly according to the performance of the chatbot until it achieved a desired result.

### Improving Humanoid Robot Jia Jia

University of Science and Technology of China

July 2016 - now

Undergraduate Researcher

- Mentor: Prof. Xiaoping Chen | http://ai.ustc.edu.cn/en/people/xpchen.php
- Description:
  - 1. Enhancing the robot's Chinese Conversation System to improve its performance of communicating with human beings.
  - 2. Applied machine learning algorithms to the Question Classification Model of Jia Jia.
  - 3. Doing some tasks like building a WeChat version of Jia Jia, labeling data, etc.

### **Knowledge Base Completion Task**

University of Science and Technology of China

Undergraduate Researcher

Sept. 2016 - now

- Advisor: Doctor Yi Zhou | Y.Zhou@westernsydney.edu.au
- Description:
  - 1. Analyzed traditional Knowledge Bases' deficiencies in solving Winograd Schema Challenge.
  - 2. Building and improving a Automated Knowledge Base Construction System referring to ProBase and DeepDive.
  - 3. Writing a paper about the things listed above.

#### **Research Interests**

Artificial Intelligence: Deep Learning, Natural Language Processing, Human-Robot Interaction

Machine Learning and Data Science, Knowledge Graph Construction

The others: Virtual Reality, Autonomous Vehicles, Social Network

### **Skills**

• Programming and Markup Languages

- Adept: Python, Java, C

- Intermediate: MATLAB, HTML, JavaScript, LATEX

Tasks

- Adept: TensorFlow Programming, Web Crawling, Dialogue System Design

- Intermediate: Visual Software Design, Web Design, Mobile Application Development