

# Shiyue Zhang

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[ZhangShiyue.github.io](https://ZhangShiyue.github.io)

## EDUCATION

**Beijing University of Posts and Telecommunications (BUPT)**, Beijing, China *Sep. 2015-Now*

M.E. in Information and Communication Engineering Rank: 23/764

*Relevant coursework:* Python, Data Mining, Machine Learning.

**Beijing University of Posts and Telecommunications (BUPT)**, Beijing, China *Sep. 2011-Jul. 2015*

B.E. in Communication Engineering GPA: 90.3/100 Rank: 14/600

*Relevant coursework:* Communication Theory, C++, Data Structure & Algorithm.

## RESEARCH EXPERIENCE

**Center for Speech and Language Technologies (CSLT), Tsinghua University** *Sep. 2016-Now*

**NLP Research Assistant, Supervised by Prof. Dong Wang** Key words: Machine translation and Parsing

- My research work is mainly on Memory-augmented Neural Model.
- Researched on Transition-based Parsing based on RNN (Chris Dyer's paper in 2016). Added a memory component (memorizing wrong instances, supposed to work as a complement) to original architecture (coding with Dynet, c++). But our idea didn't work well, this work was halted at the end of 2016.
- Researching on Attention-based NMT (Dzmitry Bahdanau's paper in 2015). Reproduced original model on Tensorflow, implemented beam search and refined model. Also add a memory component (memorizing target words, supposed to help translation). A immature version of this work was submitted to ACL17.

## PUBLICATIONS

- Yang Feng, **Shiyue Zhang**, Andi Zhang, Dong Wang, Andrew Abel. "Memory-augmented Neural Machine Translation". *EMNLP 2017*. Submitted.
- Jiyuan Zhang, Yang Feng, Dong Wang, Andrew Abel, **Shiyue Zhang**, Andi Zhang. "Flexible and Creative Chinese Poetry Generation Using Neural Memory". *ACL 2017*. Accepted.
- Zhiyuan Tang, Ying Shi, Dong Wang, Yang Feng, **Shiyue Zhang**. "Memory Visualization for Gated Recurrent Neural Networks in Speech Recognition". *ICASSP 2017*. Accepted.

## INTERNSHIP EXPERIENCE

**News App YouDian, YOKA.com** *April.2015-Aug.2015*

**SDE Intern** Key words: News personalized recommendation, LDA, Data crawler

- Designed a weibo crawler to crawl the tweets related to hot key words everyday.
- Participated in designing the news personalized recommendation system. Independently implemented the "LDA recaller" module, which represents 'user interest' and 'article content' by topic model(LDA). This module brought 15% CTR, and ranked No.1 among other modules.

**ISCAS-TOYOTA Project, Institute of Software Chinese Academy of Sciences (ISCAS)** *Nov.2014-Jan.2015*

**Research Intern** Key words: Data crawler, analysis, and visualization, Automobile fuel consumption

- Crawled car data of 60+ car brands and related user feedbacks from *autohome.com.cn*. Analyzed the factors of automobile fuel consumption using anova and decision tree. Reported to TOYOTA with visualized analysis results.

## PROJECT EXPERIENCE

**National Youth Science Foundation, BUPT** *Dec. 2015-Now*

**Research on Wikipedia** Key words: Article Quality Assessment

- Researching on how to assess/predict Wikipedia article quality accurately.
- Designed multi-thread WikiAPI crawler and crawled wikidata about 600G+. Built a basic quality evaluation model by feature engineering and linear regression, which outperformed previous works.
- Using LSTM to learn representation of article edit history, and thus to predict quality, model is built with Theano.

**Car Rental Online Service, BUPT** *May.2012-Jan.2013*

**Team leader&Frontend programmer** Key words: HTML, CSS, Java Web

- Behaved as the team leader and designed database, web service framework.
- Front-end design and implement using HTML & CSS.

## HONORS AND AWARDS

- **National Scholarship (1%, twice)** 2013/2014
- Excellent Graduate of BUPT (5%) 2015
- Excellent Student of BUPT (5%, three times) 2012/2013/2014
- Member of *YePeida (Pioneer of Optical Communication in China) School* (5%) 2013

## SKILLS

- Python > C/C++ > Java. Skilled with data structure and algorithm.
- Linux, TCP/IP, Web Service, SQL and MongoDB. Skilled with Git. Experienced in Spark (Python).
- Machine learning & NLP. Experienced in Tensorflow, Dynet, Theano, Scikit-learn.
- English Skill: TOFEL: 102, GRE: 323.
- Love to learn & Fast to learn.