

# CV - Yutong Shao

## 1. Personal Information

Phone: 858-203-8213

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Personal Webpage: [sythello.github.io](https://sythello.github.io)

## 2. Education

09/2018 - (now)      Computer Science and Engineering Department, UC San Diego

Degree: Ph.D. (in progress)

Major: Computer Science (GPA: 4.0/4.0)

Advisor: Prof. Ndapa Nakashole

09/2014 - 07/2018    School of Electronics Engineering and Computer Science,  
Peking University

Degree: B.S., with honor

Major: Computer Science (GPA: 3.73/4.0; ranking: 5/190)

Advisor: Prof. Zhi-Hong Deng

## 3. Work History

2022	Applied Scientist Intern, Amazon Alexa	Seattle, Washington
2021	Research Scientist Intern, Megagon Labs	Mountain View, California
2017	Research Intern, University of Edinburgh	Edinburgh, Scotland, UK

## 4. Publications

- (1) **Y. Shao**, A. Kumar, N. Nakashole. *Database-aware ASR Error Correction for Speech-to-SQL Parsing*, ICASSP 2023.
- (2) **Y. Shao**, A. Kumar, and N. Nakashole. *Structured Data Representation in Natural Language Interfaces*, IEEE Data Eng. Bull. 2022 (invited paper).
- (3) **Y. Shao**, N. Bhutani, S. Rahman, E. Hruschka. *Low-resource Entity Set Expansion on User-generated Text*, NAACL 2022 (Findings). (Work done during internship at Megagon Labs)
- (4) Y. Wang, **Y. Shao**, N. Nakashole. *Interactive Plot Manipulation using Natural Language*, NAACL 2021 (Demo).
- (5) **Y. Shao**, N. Nakashole. *ChartDialogs: Plotting from Natural Language Instructions*, ACL 2020.

- (6) **Y. Shao**, R. Sennrich, B. L. Webber, and F. Fancellu. *Evaluating Machine Translation Performance on Chinese Idioms with a Blacklist Method*, LREC 2018.  
(Work done during internship at University of Edinburgh)

## 5. Other Academic Experience

- (1) A Study on Linearizing Structured Data: Insights from Text-to-SQL, 2023. Paper under submission at ARR.
  - *We conducted detailed explorations into the inner mechanisms of a strong text-to-SQL model with T5 backbone on linearized structured data, obtaining various interesting findings on its internal behaviors.*
- (2) Multi-document Product Review Summarization, applied scientist internship at Amazon Alexa AI, 2022.
  - *Improved LongFormer-based summarization model using sentence clustering and distant-supervised fine-tuning of BERT-based aspect extractor.*
- (3) Exploring Domain Adaptability for Sentiment Classification Models, open-ended course project, 2018.
  - *A comparative study to evaluate the domain transfer abilities of various representative sentiment classification models, neural and non-neural.*
- (4) Stock Price Prediction Based on Deep Learning, Bachelor's thesis supervised by Prof. Zhi-Hong Deng, Spring 2018.
  - *Developed a working method for stock prediction using LSTM-VAE on sequential features extracted from raw prices, human-designed metrics and textual news.*
- (5) Automatic Headline Generation based on Deep Learning, undergraduate research program under the supervision of Prof. Zhi-Hong Deng, Autumn 2017.
  - *Developed a Chinese news headline generation model based on hierarchical attention network (HAN) and LSTM.*
- (6) SemEval Contest, Task 1 (Semantic Textual Similarity), Autumn 2016, ranked 8/32 in the En-En subtask.
  - *Developed a sentence similarity prediction model based on token-wise embedding similarity matrix and CNN.*

## 6. Honors

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|------|---|
| 2017 | Merit Student, Peking University                              |
| 2017 | Outstanding Undergraduate Research Project, Peking University |
| 2017 | The Third Prize, ACM Campus Contest, Peking University        |
| 2016 | TP-Link Scholarship, Peking University                        |
| 2016 | The Third Prize, ACM Campus Contest, Peking University        |
| 2015 | Suzhou Industrial Park Scholarship, Peking University         |

2015 The Second Prize, ACM Campus Contest, Peking University

2015 The Second Prize, "Jiangzehan" Mathematical Modeling Contest, Peking University

## 7. Technical Skills

Proficient Programming Language: Python, Java, C++

Proficient Software & Packages: PyTorch, AllenNLP, Matplotlib, Amazon MTurk

## 8. Teaching Experience

- TA for course "Statistical Natural Language Processing" (CSE 256) at UCSD, Spring 2023.

- TA for course "Recommender Systems and Web Mining" (CSE 158) at UCSD, Winter 2023.

- TA for course "Topics in Computer Science & Engineering: Advanced Statistical NLP (Research)" (CSE 291) at UCSD, Winter 2021.

- TA for course "Algorithm Design and Analysis" (Discussion Sessions) at Peking University, 2017.