Jingfeng Yang

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EDUCATION

School of Electronics and Computer Science, Peking University, Beijing, China

Sep 2016- July 2019

Major: Computer Science (B.S.) Overall GPA: 3.70

Core Courses: Empirical Method in Natural Language Processing (95.5) / Mathematical Logic(95) / Discrete Mathematics (94) / JavaScript Web Programming (94) / Software Engineering (93) / Java Programming (92) / Electromagnetism (92) / Data structure and Algorithm (90.5) / Introduction to The Database (90) / Linear Algebra(89) / Probability Theory and Statistics (A)(89) / Compiler Design (89) / Numerical Methods(88) / Advanced Mathematics(87) / Operating System / Introduction to Database Systems / the C++ Programming Language / ...

School of Life Science, Peking University, Beijing, China

Sep 2015- July 2019

Major: Biological science (B.S.) Overall GPA: 3.61 Ranking: Top 20% in 100+ students

RESEARCH EXPERIENCES

Cross-Lingual and Mono-lingual Semantic Parsing to generate Discourse Relation Structure for Parallel Meaning Bank

University of Edinburgh | Visiting Student

July 2018- Sep 2018

Advisor: Bonnie Webber, professor in Institute for Language, Cognition and Computation

- > Implemented a model composed of a tree-LSTM encoder and a three-stage coarse-to-fine decoder with attention mechanism and copying mechanism to conduct semantic parsing
- > Applied the model to generating Discourse Relation Structure Representations for Parallel Meaning Bank
- Leveraged Universal Dependency structure information and cross-lingual word embeddings to conduct experiments in Italian, German, and Dutch while training the model using English data.

English Elementary Discourse Units segmentation | Peking University | Research Assistant

Feb 2018 - May 2018

Advisor: Sujian Li, associate professor in Institute of Computational Linguistics, Peking University

- ➤ Used SVM, Logistic Regression and Random Forest along with some useful features including some specific constituency parsing tree features to conduct English EDU segmentation.
- ➤ Helped another researcher develop a Fast and Accurate Elementary Discourse Units segmenter using BiLSTM-CRF, self-attention and ELMo.

Cross-lingual Elementary Discourse Units segmentation | Peking University | Research Assistant

Sep 2017- Feb 2018

Advisor: Sujian Li, associate professor in Institute of Computational Linguistics, Peking University

- > Applied an adversarial multi-task neural network to cross-lingual EDU segmentation
- > Improved the performance of transfer learning and domain adaption in multilingual scenarios.
- > Designed a map from language-specific POS tag set to Universal POS tag set, put forward some standard rules of Chinese EDU segmentation based on Rhetorical Structural Theory(RST) and annotated a corpus.

Discourse Relation Classification | Peking University | Research Assistant

Jul 2017- Aug 2017

Advisor: Sujian Li, associate professor in Institute of Computational Linguistics, Peking University

- ▶ Helped a researcher to design a Tree-LSTM and Tree-GRU network to solve the problem of implicit discourse relation classification
- > Incorporated POS tag information to tree-structured neural network to improve the performance

PUBLICATIONS

Yizhong Wang, Sujian Li, Jingfeng Yang. 2018. Toward Fast and Accurate Neural Discourse Segmentation. In 2018 Empirical Methods in Natural Language Processing (EMNLP).

Yizhong Wang, Sujian Li, Jingfeng Yang, Xu Sun, Houfeng Wang. 2017. Tag-enhanced tree-structured neural networks for implicit discourse relation classification. In *The 8th International Joint Conference on Natural Language Processing (IJCNLP)*.

PRIPRINTS

Jingfeng Yang, Sujian Li. 2018. Chinese Discourse Segmentation Using Bilingual Discourse Commonality. Submitted to 2019 *NAACL-HLT arXiv:1809.01497*.

WORKING EXPERIENCES

Consecutive Question Generation | Microsoft Research Asia | SWE intern | Beijing

Dec 2018 - March 2019

SKILLS

Programming Languages: C/C++, python, Java, JavaScript/Jquery, html/css/xml, PHP, SQL

Machine Learning Toolkits: PyTorch, TensorFlow, Scipy, scikit-learn

Operating Systems: Linux (Preferred), Windows

Other tools: Git, Matlab, Jupyter

LEADERSHIP AND ACTIVITIES

"Mentor" Organization, Peking University | Administrator

Sep 2016 - June 2018

- Organize seminars every weekend and welcome parties for freshmen every year
- Invited some outstanding people to give lectures
- ➤ Help college freshmen adapt to college life

FELLOWSHIPS/AWARDS

- May 4th Scholarship, 2016-2017
- > Kwang-Hua Scholarship, 2015-2016
- Merit Student of Peking University, 2015-2016, 2016-2017
- ➤ Silver medal in China Mathematics Olympiad (CMO), 2015