

Peng Xu

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April 1, 2018

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<http://billy-inn.github.io/about>

Education

- **University of Alberta** Edmonton, AB
M.Sc. Computer Science 2016 - 2018(Expected)
 - GPA: 4.0/4.0
 - Supervisor: Prof. Denilson Barbosa
- **Beijing University of Posts and Telecommunications** Beijing
B.Eng. Electronic Information Engineering 2011 - 2015
 - Major: 89.62/100, Overall: 87.06/100
 - Thesis Advisor: Prof. Jie Tang

Research Experience

- **DBpedia**
Active Contributor and Mentor for Google Summer of Code (GSoC) 2016-Present
 - Inferred infobox template class mappings from Wikipedia and WikiData in `python` in 2016
 - Mentored two GSoC projects about entity embeddings based on DBpedia in 2017
 - Mentoring one GSoC project about DBpedia embeddings for OOV resources in 2018
- **University of Alberta** Edmonton, AB
Research Assistant under Prof. Denilson Barbosa 2016-Present
 - Research on fine-grained entity type classification (FETC) with deep neural models
 - Research on relation extraction (RE) with deep neural models
 - Research on incorporating knowledge base (KB) information to facilitate neural information extraction, mainly on task of FETC and RE
- **Tsinghua University** Beijing
Research Assistant under Prof. Jie Tang 2014-2015
 - Developing **Arnetminer II** which is a website that offers comprehensive search and mining services for academic community in `python` and `scala`
- **Tsinghua University** Beijing
Research Assistant under Prof. Zhihu Du 2014 Summer
 - Research on efficient partial-mesh spreading in `C` and `CUDA`

Publications

1. Topic: Faciliate Neural Relation Extraction with Knowledge Base Embeddings
Submitted to *ACL 2018*, long paper
Peng Xu, Denilson Barbosa

2. *Towards Neural Information Extraction without Manual Annotated Data*
M.Sc. Thesis (In progress)
3. *Neural Fine-Grained Entity Type Classification with Hierarchy-Aware Loss*
To appear in the Proceedings of *NAACL 2018*, long oral paper
Peng Xu, Denilson Barbosa
4. *Matching Resumes to Job Descriptions with Stacked Models*
The 31st Canadian Conference on Artificial Intelligence, 2018.
Peng Xu, Denilson Barbosa
5. *Investigations on Knowledge Base Embedding for Relation Prediction and Extraction*
arXiv preprint, 2018
Peng Xu, Denilson Barbosa
6. *Efficient Particle-Mesh Spreading on GPUs*
In Proceedings of the 15th International Conference on Computational Science (ICCS), 2015
Xiangyu Guo, Xing Liu, **Peng Xu**, Zhihu Du, Edmond Chow

Teaching

- **Machine Learning** University of Alberta
Teaching Assistant 2016 Fall, 2017 Fall
- **Introduction to the Foundations of Computation II** University of Alberta
Teaching Assistant 2018 Winter
- **Introduction to the Foundations of Computation I** University of Alberta
Teaching Assistant 2017 Winter

Awards & Honors

Programming Contest of *BUPT*, Gold Medalist 2013
ACM-ICPC Hunan Invitational Programming Contest, Bronze Medalist 2013
 Third Grade Scholarship for Undergraduates 2013-14
 Second Grade Scholarship for Undergraduates 2012-13
 Third Grade Scholarship for Undergraduates 2011-12

Skills

- **Research:** Natural Language Processing, Knowledge Base, Machine Learning, Reinforcement Learning, Data Mining, Optimization.
- **Development:** Python (preferred), L^AT_EX, C/C++, CUDA, Scala, R, Bash, Matlab(Octave)
- **Technology:** TensorFlow, Keras, PyTorch, Scikit-learn, XGBoost, Gensim, Linux, Git, Vim, Tmux