

Education

2011-2015(expected) **BA in Electronic Information Engineering**, *Beijing University of Posts and Telecommunications*, Beijing, Major: 89.62/100, Overall: 87.06/100.

Academic Interests

- Statistical Machine Learning
- Data Mining
- Parallel Computing

Research Experience

- 2014 **High Performance Computing Laboratory**, *Tsinghua University*, Beijing, GPU, implementation and optimization of parallel algorithms on GPUs.
- 2014 **Knowledge Engineering Group**, *Tsinghua University*, Beijing, Machine learning, data mining, information retrieve, knowledge graph and probabilistic graphical models.

Publications

- 2014 Xiangyu Guo, Xing Liu, **Peng Xu**, Zhihu Du, Edmond Chow, ***Efficient Particle-Mesh Spreading on GPUs (submitted)***, In 29th IEEE International Parallel and Distributed Processing Symposium(IPDPS), 2015

Project Experience

- 2014 **Crawler For Google Crawler**, *python*, Research Project
It's a sub-project of Aminer which offers comprehensive search and mining services for academic community. And I develop a web crawler to crawl the whole co-author network with all their papers on Google Scholar through bfs. In order to avoid blockage of Google, I also write several crawlers to obtain thousands of proxies.
- 2014 **Identify Experts In Baidu Baike**, *python*, Research Project
Develop a GUI to accept the input information of the experts entered or from the database. Use the given information to identify the experts in Baidu Baike, which is a website like Wikipedia in Chinese. And try various methods including SVM and Logistic Regression to improve the accuracy and recall.

- 2014 **Efficient Particle-Mesh Spreading on GPUs**, *C, CUDA*, Research Project
Study various approaches for particle-mesh spreading on GPUs. A central concern is the use of atomic operations. We are also concerned with the case where spreading is performed multiple times using the same particle configuration, which opens the possibility of preprocessing to accelerate the overall computation time. Experimental tests show which algorithm are best under different circumstances. Our work is submitted to IPDPS, 2015
- 2014 **"Social Networks and Algorithms Design" Curriculum Design**, *python, Matlab*, Course Project
Based on data provided by Alibaba, use logistic regression and SVM to predict the behaviors of the consumers.
- 2014 **Classification of Weibo Users' Identification**, *python*, Individual Project
Use web crawler to get the data needed, and then use logistic regression to train the data. Finally applying the classifier we got to classify the given users.
- 2012 **Bi-Tetris**, *C++*, Course Project
A game of tetris which supports two players play together on console via multiple threads.

Community

Homepage billy-inn.github.io/Homepage/
 Blog billyinn.wordpress.com My blog(English)
 GitHub github.com/billy-inn
 Codeforces codeforces.com/profile/billy_inn, rating 1732

Awards

- 2014 Enter the quarter-final in **Microsoft Programming of Beauty Contest**, Rank 134 of 988
- 2013 Bronze Medalist in **ACM-ICPC Hunan Invitational Programming Contest**
- 2013 Gold Medalist in **Programming Contest of BUPT**

Skills

Languages C++, python, \LaTeX , CUDA, Matlab, Shell
 Mathematics Interested in *Statistics, Number Theory, Graph Theory, Combinatorics* and learn related textbooks by myself. I also often solve problems on *Euler Project*
 Coursera *Machine Learning, Probabilistic Graphical Models, Game Theory*