

Jiaming Song

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Education

- 2016 – **Stanford University**, Palo Alto, CA.
Ph.D. Program in Computer Science
- 2012 – 2016 **Tsinghua University (THU)**, Beijing, China.
B.Eng. in Computer Science and Technology. Graduated with Outstanding Honor (Top 1%).
GPA: 93/100. **Rank:** 1/116.
- July 2014 **National Tsing Hua University (NTHU)**, Hsinchu, Taiwan.
Exchange student, Electrical Engineering and Computer Science

Publications and/or Submitted Manuscripts

- June 2016 **Factored Temporal Sigmoid Belief Networks for Sequence Learning**
[Jiaming Song](#), [Zhe Gan](#) and [Lawrence Carin](#). In *the 33rd International Conference on Machine Learning (ICML)*.
- In submission **Max Margin Nonparametric Latent Feature Models for Link Prediction**
[Jun Zhu](#), [Jiaming Song](#) and Bei Chen.
- February 2016 **Discriminative Nonparametric Latent Feature Relational Models with Data Augmentation**
Bei Chen, Ning Chen, [Jun Zhu](#), [Jiaming Song](#) and Bo Zhang.
In *the 30th Association for the Advancement of Artificial Intelligence (AAAI) Conference*.
- September 2015 **Organizational Churn: A Roll of the Dice?**
Canyao Liu*, [Jiaming Song](#)* and Chuan Yu*.
In *Undergraduate Mathematics and Its Applications*, Journal Issue 36.2. Corresponding author.

Research Experiences

- Sept 2016 – **Future Data Systems Group**, Stanford University. Advisor: Prof. [Peter Bailis](#)
Efficient unsupervised learning of time-series for MacroBase (outlier detection) using deep generative models.
- April 2016 – **Detection, Tracking and Reidentification Group**, Megvii Inc. Mentor: Chi Zhang
- July 2016 Developed a scalable framework to provide supervision for unlabeled data with trained models, which allows model distillation and merging network structures for different tasks, such as detection and parsing. [Megvii Inc.](#) is a leading unicorn start-up in China, with emphasis on machine learning and computer vision.
- July 2015 – **Information Initiative @ Duke (iiD)**, Duke University. Advisor: Prof. [Lawrence Carin](#).
- September 2015 Worked on conditional factored deep generative models using recent Neural Variational Inference methods, which allows for semi-supervised deep learning and sequence generation with side information. **Our work is accepted by the 33rd International Conference on Machine Learning.**
- November 2014 **Statistical AI & Learning (TSAIL) Group**, Tsinghua University. Advisor: Prof. [Jun Zhu](#).
- June 2015 Explored stochastic variational methods for link prediction problems. Proposed an efficient method that would train on a network with over 3 million nodes, a significant improvement over original methods. **Our work is under review by the IEEE Transactions on Pattern Analysis and Machine Intelligence.**
- July 2014 – **Visual Computing Group**, Microsoft Research Asia. Advisor: [Jingdong Wang](#).
- October 2014 Implemented a convolutional neural network for multiple label image annotation with [Caffe](#).
- October 2013 – **TSAIL**, Tsinghua University. Advisor: Prof. [Jun Zhu](#).
- June 2014 Implemented a Gibbs sampling algorithm for [Scalable Inference for Logistic Normal Topic Models](#) (NIPS 2013).

Honors and Awards

- June 2016 **Qualcomm Scholarship**, issued by Qualcomm.
Offered to Tsinghua undergraduates with exceptional research experiences (top 1%).

- June 2015 **Google Excellence Scholarship**, issued by Google.
This scholarship is offered to Chinese undergraduate and graduate students who possess remarkable academic achievements and project experiences. 58 students are selected nationwide (6 in Tsinghua University).
- April 2015 **Outstanding Winner**, Interdisciplinary Contest in Modeling 2015.
Highest award (9 out of 2317) of the contest. Published a paper which models organizational churn using Bayesian-inspired methods and network science. See github.com/jiamings/icm2015 for more details.
- April 2015 **Third Prize**, 33rd Tsinghua Challenge Cup, issued by Tsinghua University.
Our project implements fast, scalable video segmentation and classification which utilizes deep activation features. Please see jiamings.github.io/projects/decaf-video for details.
- October 2014 **Outstanding Undergraduate**, issued by the China Computer Federation (CCF).
Only 4 students in Tsinghua, and 100 in China are awarded each year.
- May 2014 **Spark Program for Technological Innovation**, Tsinghua University.
Among top 50/3000 students for achievements in scientific and technological innovations.
- December 2013 **Zhong Shimo Scholarship**, issued by Dept. of Computer Science and Technology.
Highest scholarship in the CS Department for academic achievements, social activities, and charity work. (top 0.75%)
- July 2011 **Bronze Prize, National Olympiad in Informatics**, issued by China Computer Federation (CCF).

Programming Experience

- Proficient in C++, Python and Matlab. Capable of Java, \LaTeX , Julia, C#, R, CUDA, Javascript, HTML/CSS, VHDL and Verilog. Some of my projects can be found on jiamings.github.io/projects.
- November 2015 **EPOC - Emotion Personalized | Online Chat**, for [HackShanghai](#), China's largest hackathon.
Modifying wallpapers and background music by mind, with the help of [Emotiv EPOC](#).
[Our project was reported by International Channel Shanghai](#).
 - June 2015 **TUSK - Tsinghua University Search Kit**, Course Project
A search engine over Tsinghua news and documents with auto-completion and voice search.
 - May 2015 **GeoRun - A Unity Game with Kinect Controls**, Course Project
We developed GeoRun, which is a simplified Temple Run game developed with Unity and Kinect SDK v1.8.
 - December 2014 **Video Classification with Visual and Audio Features**, Course Project.
This project aims to do fast and scalable video sequence classification through deep feature extraction methods. We use **Caffe** for deep visual feature extraction.

Language Proficiency

- TOEFL Total: 113 (Reading: 30; Writing: 29; Speaking: 24; Listening: 30).
- GRE Verbal: 160/170 (85%); Quantitative: 170/170 (98%); Analytical Writing: 5.0/6.0 (93%).

Extracurricular Courses

- Coursera Machine Learning | Introduction to Marketing | Introduction to Financial Accounting | Social and Economical Networks: Models and Analysis | Introduction to Classical Music | Microeconomics: The Power of Markets | Microeconomics: When Markets Fail

Activities

- August 2013 **Building Bridges Charity Project**, Coordinator, Tsinghua University.
Spend one week teaching high school students in Lishui, Zhejiang with students from Tsinghua U., Peking U. Yale U, etc. Coordinated the team of Tsinghua students.
- August 2014 **Initiating Mutual Understanding through Student Exchange**, Vice President, Tsinghua U, Peking U, and Harvard U.
Organized the event planning and design process for IMUSE, a 8-day forum where students from China and the US. share their life stories and thoughts, and experience life together.