

# Yingtao Tian

Computer Science Department, State University of New York at Stony Brook  
E-mail: [alan.yt.tian@gmail.com](mailto:alan.yt.tian@gmail.com)

## EDUCATION

- State University of New York at Stony Brook**, New York, United States  
Ph.D, Computer Science Fall 2014 - Ongoing
- Advisor: [Prof. Steven Skiena](#)
  - Research interest: Natural language processing, especially on representation learning and multilingual applications, by combining deep learning and linguistics models.
- Fudan University**, Shanghai, China  
B.Sc., Computer Science and Technology 2010 - 2014

## EXPERIENCE

- Google Brain**), California, United States  
*Software Engineering Intern* May 18 - Aug. 2018
- Host: [Dr. Jesse Engel](#)
  - **Research on latent space of generative model** (Internship is on-going)
- Facebook**, California, United States  
*Software Engineering Intern* May 2017 - Aug. 2017
- Host: [Dr. Haixun Wang](#)
  - **Research on natural language understanding.** Researched on Web Query Parsing by inferring query treebank, and Natural Language Interface to Database System leveraging database table schema with Seq2seq models.
- Google Brain**, California, United States  
*Software Engineering Intern* May 2016 - Nov. 2016
- Host: [Dr. Stephan Gouws](#)
  - **Research on representation learning**  
Researched on investigating new representation learning techniques for both units (words) and sequences (sentences). Worked on sequence model for sentence representation and hierarchical embeddings.
- Google**, New York, United States  
*Software Engineering Intern*, Search Group May 2015 - Aug. 2015
- Host: Dr. Xiaomeng Ban
  - **User-generated activity profiling and analysis**  
Implemented a profiling tool for analyzing activities generated by billions of users.  
Built a full-stack framework using a proper combination of distributed processing, aggregation and visualization for effective large-scale analysis of user-generated content.  
Leveraged module-based design for flexibilities to easily integrate new profiling tasks.
- Microsoft Research Asia**, Beijing, China  
*Research Intern*, [Data Management, Analytics and Services Group](#) Feb. 2013 - July 2013
- Advisor: [Dr. Haixun Wang](#)
  - **Learning Semantic Vector Representation from Large Knowledge Base**  
Proposed and made experiments on a framework generating semantic embeddings (vector representation) from Probbase, a large knowledge base and probabilistic taxonomy.
- Research Intern*, [Web Search and Mining Group](#) July 2013 - Dec. 2013
- Advisor: [Zhongyuan Wang](#)
  - **Concept Level Semantic Analysis**  
Proposed and implemented semantic level text comparison based on concept level information extracted from corpus and probabilistic taxonomy.

Fudan University, Shanghai, China

Research Assistant, Graph Data Management Lab

Oct. 2012 - June 2014

- Advisor: Prof. Yanghua Xiao
- Designed and built a mechanism to extract information from huge amount of crawled web pages.

PUBLICATIONS /  
WORKING PAPERS

**Enhanced Network Embeddings via Exploiting Edge Attributes** Haochen Chen, *Yingtao Tian*, Muhao Chen, Xiaofei Sun, Bryan Perozzi and Steven Skiena  
*Submitted to International Conference on Information and Knowledge Management (CIKM), 2018*

**Social Relation Inference via Label Propagation** *Yingtao Tian*, Haochen Chen, Bryan Perozzi, Muhao Chen, Xiaofei Sun and Steven Skiena  
*Accepted in 14th International Workshop on Mining and Learning with Graphs*  
*Submitted to International Conference on Information and Knowledge Management (CIKM), 2018*

**DeepAnnotator: Genome Annotation with Deep Learning** Mohammad Ruhul Amin, Alisa Yurovsky, *Yingtao Tian*, Steven Skiena  
*To Appear in the 9th ACM Conference on Bioinformatics, Computational Biology, and Health Informatics (ACM-BCB), 2018*

**Simple Neologism Based Domain Independent Models to Predict Year of Authorship** Vivek Kulkarni, *Yingtao Tian*, Parth Dandiwala, Steven Skiena  
*To Appear in the 27th International Conference on Computational Linguistics (COLING 2018)*

**Co-training Embeddings of Knowledge Graphs and Entity Descriptions for Cross-lingual Entity Alignment** Muhao Chen, *Yingtao Tian*, Kai-Wei Chang, Steven Skiena, Carlo Zaniolo  
*To Appear in the 2018 International Joint Conference on Artificial Intelligence*

**Syntax-Directed Variational Autoencoder for Structured Data** Hanjun Dai\*, *Yingtao Tian*\*, Bo Dai, Steven Skiena, Le Song. (\* Equal Contribution)  
*To Appear in the International Conference on Learning Representations (ICLR), 2018.*  
*Best Paper Award, NIPS 2017 workshop for Machine Learning for Molecules and Materials.*

**Embedding-based Relation Prediction for Ontology Population** Muhao Chen, *Yingtao Tian*, Xuelu Chen, Zijun Xue, Carlo Zaniolo  
*To Appear in the 17th SIAM International Conference on Data Mining (SDM), SIAM 2018.*

**Towards End-End Generation of High-Resolution Images with Generative Adversarial Networks** [Online Demo] Yanghua Jin, Jiakai Zhang, Minjun Li, *Yingtao Tian*, Huachun Zhu  
*Accepted and presented in spotlight, NIPS 2017 workshop for Machine Learning for Creativity and Design.*

**Multilingual Knowledge Graph Embeddings for Cross-lingual Knowledge Alignment** Muhao Chen, *Yingtao Tian*, Mohan Yang, Carlo Zaniolo.  
*In Proceedings of the 26th International Joint Conference on Artificial Intelligence (IJCAI), IJCAI/AAAI Press 2017.*

PROFESSIONAL  
SERVICES

Reviewer, *LREC 2018*, *COLING 2016*

PATENTS

**Training and/or Utilizing Recurrent Neural Network Model to Determine Subsequent Source(s) for Electronic Resource Interaction** *Patent in submission, 2017*

HONORS AND AWARDS	<p><b>27th place</b>, 35th Annual World Final of the <a href="#">ACM-ICPC</a> (2011)</p> <p><b>Gold Medal</b>, <a href="#">ACM-ICPC</a> Asia Chengdu Regional Contest, 2011</p> <p><b>Championship and Gold medal</b>, <a href="#">ACM-ICPC</a> Asia Amritapri Regional Contest, 2010</p>
SERVICES	<div> <div>Team member and assistant coach, <a href="#">ACM-ICPC</a> team of Fudan University</div> <div>2010 - 2013</div> </div> <ul style="list-style-type: none"> <li>• Team member in the <a href="#">ACM-ICPC</a> competition</li> <li>• Assistant coach serving for daily training and competitions overseas.</li> </ul> <div> <div>Main technical staff, <a href="#">ACM-ICPC</a> Shanghai Site Contest</div> <div>Oct. 2011</div> </div> <ul style="list-style-type: none"> <li>• I participated in setting up the system for 2011 <a href="#">ACM-ICPC</a> Shanghai</li> <li>• Sites Contest as one of main technical staffs.</li> </ul>
OTHER EXPERIENCE	<div> <div>Contest Level Problem Solver</div> <div>2009 - Present</div> </div> <p>An expert on problem solving under alias “alantian”.</p> <p>Participated algorithm contests including Olympiad in Informatics, <a href="#">ACM-ICPC</a>. and <a href="#">Google Code Jam</a></p>