

# Bang An

PhD student | Computer Science | University of Maryland

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## EDUCATION

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**University of Maryland, College Park**, MD, US *Sep 2020 - Present*

Ph.D. student, Department of Computer Science

Advisor: Prof. Furong Huang

**Tsinghua University**, Beijing, China *Sep 2013 - Jul 2016*

Master of Science, Department of Automation, School of Information Science and Technology

**Northeastern University**, Shenyang, China *Sep 2009 - Jul 2013*

Bachelor of Engineering, Department of Automation, Information Science and Engineering

## PUBLICATIONS

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### Peer-Reviewed Conference Papers

Sicheng Zhu\*, **Bang An**\*, Furong Huang. “Understanding the Generalization Benefit of Model Invariance from a Data Perspective”. In *Conference on Neural Information Processing Systems (NeurIPS)*, 2021. (\* equally contributed)

Xueting Han, Zhenhuan Huang, **Bang An**, Jing Bai. “Adaptive Transfer Learning on Graph Neural Networks”. In *ACM SIGKDD Conference on Knowledge Discovery and Data Mining (KDD)*, 2021.

**Bang An**, Jie Lyu, Zhenyi Wang, Chunyuan Li, Changwei Hu, Fei Tan, Ruiyi Zhang, Yifan Hu and Changyou Chen. “Repulsive Attention: Rethinking Multi-head Attention as Bayesian Inference”. In *Empirical Methods in Natural Language Processing (EMNLP)*, 2020.

Honglei Guo, **Bang An**, Zhili Guo, Zhong Su. “Deep Semantic Compliance Advisor for Unstructured Document Compliance Checking”. In *International Joint Conference on Artificial Intelligence (IJCAI)*, 2020.

Zhenyi Wang, Xiaoyang Wang, **Bang An**, Dong Yu, Changyou Chen. “Towards Faithful Neural Table-to-Text Generation with Content-Matching Constraints”. In *Association for Computational Linguistics (ACL)*, 2020.

**Bang An**, Peng Cheng, Xiang Zou. “A Smart Sectorization Approach Based on Spectral Clustering and NSGA-II”. In *IEEE International Smart Cities Conference*, 2015.

### Peer-Reviewed Journal Articles

Xiang Zou, Peng Cheng, **Bang An**, Jingyan Song. “Sectorization and Configuration Transition in Airspace Design”. In *Mathematical Problems in Engineering*, 2016.

**Bang An**, Peng Cheng. “An Algorithm for a Class of Uncapacitated Facility Location Problem Based on Branch-and-Cut”. In *Operations Research Transactions*, 2015. (Journal in Chinese)

### Workshop Papers

**Bang An**, Xuannan Dong, Changyou Chen. “Repulsive Bayesian Sampling for Diversified Attention Modeling”. In *NeurIPS Workshop on Bayesian Deep Learning*, 2019.

Sicheng Zhu, **Bang An**, Shiyu Niu. “Guess First to Enable Better Compression and Adversarial Robustness”. In *NeurIPS Workshop on Information Theory and Machine Learning*, 2019.

### EMPLOYMENT

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<b>Microsoft Research Asia</b> , Beijing, China <i>Research intern in System Intelligence Team</i>	<i>Sep 2020 - Dec 2020</i>
<b>State University of New York at Buffalo</b> , Buffalo, NY, US <i>Visiting scholar in Machine Learning group,</i> Host: Prof. Changyou Chen	<i>Jul 2019 - May 2020</i>
<b>IBM Research - China</b> , Beijing, China <i>Research staff member in NLP Team</i> Mentor: Dr. Zhong Su	<i>Aug 2018 - Jun 2019</i>
<b>China Transport Information Center Co., Ltd.</b> , Beijing, China <i>Machine learning engineer</i>	<i>Jul 2016 - Jul 2018</i>
<b>Samsung Electronics China Research Institute.</b> , Beijing, China <i>Research intern</i>	<i>Jun 2015 - Sep 2015</i>
<b>Institute of Software Chinese Academy of Sciences.</b> , Beijing, China <i>Research intern</i>	<i>Jun 2014 - Sep 2014</i>

## UMD COURSES

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CMSC828W: Foundations of Deep Learning	A
CMSC828U: Algorithms in Machine Learning: Guarantees and Analyses	A
CMSC764: Advanced Numerical Optimization	A
CMSC828M: Applied Mechanism Design for Social Good.	A

## HONORS & AWARDS

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Comprehensive Excellent Scholarship of Tsinghua University, China, 2014 and 2015  
College Graduate Excellence Award of Liaoning Province (top 1%), China, 2013  
First Prize of National Mathematics Competition in Liaoning Province, China, 2013  
Third Prize of National Computer Game Tournament (Phantom Go Track), China, 2012  
National Undergraduate Scholarship (top 1%), China, 2010, 2011, 2012  
First Prize Scholarship of Northeastern University (top 2%), China, 2010, 2011, 2012