

JUNYI GAO

University of Illinois Urbana-Champaign, the U.S.

[junyii.gao@gmail.com](mailto:junyi.gao@gmail.com)

EDUCATION

University of Illinois Urbana-Champaign

Ph.D. in Computer Science

IL, the U.S.

Aug 2020 – Present

Beihang University

B.Eng. in Software Engineering

Beijing, China

Sep 2015 – Jul 2019

- **Honored Graduate**

PUBLICATIONS

1. **Junyi Gao**, Rakshith Sharma, Cheng Qian, Lucas M Glass, Jeffrey Spaeder, Justin Romberg, Jimeng Sun, Cao Xiao. STAN: Spatio-Temporal Attention Network for Pandemic Prediction Using Real World Evidence, *Journal of the American Medical Informatics Association* (IF 4.29).
2. Liantao Ma, Xinyu Ma, **Junyi Gao**, Chaohe Zhang, Zhihao Yu, Xianfeng Jiao, Wenjie Ruan, Yasha Wang, Wen Tang, Jiangtao Wang. CovidCare: Transferring Knowledge from Existing EMR to Emerging Epidemic for Interpretable Prognosis, *WWW*, 2021. **[Oral]**
3. Cao Xiao, **Junyi Gao**, Lucas Glass, Jimeng Sun, Christina Mack. Two Machines are Better Than One: Using Multi-agent Reinforcement Learning to Simulate a Clinical Second Opinion, *Pharmacoepidemiology and Drug Safety* (IF 2.9).
4. Cao Xiao, **Junyi Gao**, Lucas Glass, Jimeng Sun. Patient Trial Matching Using Pseudo-Siamese Network, *Journal of Clinical Oncology* (IF 32.9).
5. **Junyi Gao**, Cao Xiao, Lucas Glass, Jimeng Sun. COMPOSE: Cross-Modal Pseudo-Siamese Network for Patient Trial Matching, *ACM SIGKDD*, 2020.
6. **Junyi Gao**, Cao Xiao, Lucas Glass, Jimeng Sun. Dr. Agent: Clinical Predictive Model via Simulated Second Opinions, *Journal of the American Medical Informatics Association* (IF 4.29).
7. **Junyi Gao**, Cao Xiao, Yasha Wang, Lucas Glass, Wen Tang, Jimeng Sun. StageNet: Stage-Aware Neural Networks for Health Risk Prediction, *WWW*, 2020. **[Oral]**
8. Liantao Ma, **Junyi Gao**, Yasha Wang, Chaohe Zhang, Jiangtao Wang, Wenjie Ruan, Wen Tang, Xin Gao, Xinyu Ma. AdaCare: Explainable Clinical Health Status Representation Learning via Scale-Adaptive Feature Extraction and Recalibration, *AAAI*, 2020. **[Oral]**
9. Liantao Ma, Chaohe Zhang, Yashang Wang, Wenjie Ruan, Jiangtao Wang, Wen Tang, Xinyu Ma, **Junyi Gao**. ConCare: Personalized Clinical Feature Embedding via Capturing the Healthcare Context, *AAAI*, 2020.
10. Jingyue Gao, Xiting Wang, Yasha Wang, Zhao Yang, **Junyi Gao**, Jiangtao Wang, Wen Tang, Xing Xie. CAMP: Co-Attention Memory Networks for Diagnosis Prediction in Healthcare, *ICDM*, 2019. **[Oral]**
11. **Junyi Gao***, Weihao Tan*, Liantao Ma, Yasha Wang and Wen Tang (Equal contribution). MUSEFood: Multi-sensor-based Food Volume Estimation on Smartphones, *The 16th IEEE International Conference on Ubiquitous Intelligence and Computing*, 2019. **[Oral]**
12. Wen Tang, **Junyi Gao**, Xinyu Ma, Chaohe Zhang, Liantao Ma, Yasha Wang. Applications of Recurrent Neural Network in Clinical Prognosis Prediction of Peritoneal Dialysis, *Journal of Peking University (Health Sciences)*, 2019.
13. Zhengtong shi, **Junyi Gao**, Liantao Ma, Yasha Wang, Jiangtao Wang, Wen Tang. Multi-sensor Integrated Food Volume Measurement Based on Smartphone, *The 14th Conference on Pervasive Computing of China*, 2018. **[Oral]**

PATENTS

1. A method and device of determining potentially important information of patients, CN 202010946290.4 (Under verification)
2. A method and system for sound wave and image-based food volume measurement on smart phone, CN 202010862933.7 (Under verification)

INVITED TALKS AND MEDIA COVERAGE

1. Invited talk on AI Time Seminar in Tsinghua University, 2020.09.
2. AdaCare and project Dr. Vis were covered by China CCTV-1 news, 2020.07.

RESEARCH EXPERIENCE

- *Analytics Center of Excellence, IOVIA* *Beijing, China*
Role: Intern machine learning researcher May 2019 – Feb 2021

Advisor: Dr. Cao Xiao

- National Software Engineering Research Centre, Peking University Beijing, China
Role: Research assistant Jan 2017 – Aug 2020
Advisor: Prof. Yasha Wang

APPLICATION PROJECTS

- Peking University Third Hospital Beijing, China
Role: Team Leader Jan 2018 – Nov 2019
 - DocVis
 - CKD Management Platform

* These systems has been applied in the Nephrology Department, Peking University Third Hospital.

SELECTED AWARDS AND HONORS

- Honored Graduate of Beihang University 2019
- Meritorious Winner (Top 10%), Mathematical Contest in Modeling, COMAP 2018
- Scholarship of Academic Excellence (Top 5%), Beihang University 2018
- Scholarship of Science and Technology Competition (Top 1%), Beihang University 2017 & 2018
- 1st prize (Top 10 out of candidates of all majors), Feng Ru Cup Competition, Beihang University 2016

TRANSLATIONS

1. Brookshear, J. G. (2017). *Computer science: an overview*, 12th. Pearson Education. Translated by Yunxiang Lu, **Junyi Gao**, Zhujun Zhang. Posts & Telecom Press, 2018.
2. Parsons, J. J. (2017). *New Perspectives on Computer Concepts 2018: Comprehensive, 20th*. Pearson Education. Translated by Yunxiang Lu, **Junyi Gao**, Xiaoliang Huo, Yuren Zhang. China Machine Press, 2018.
3. Sommerville, I. (2017). *Software Engineering, 10th*. Pearson Education. Translated by Yunxiang Lu, **Junyi Gao**, Zhujun Zhang, Hongyang Wang. Posts & Telecom Press, 2018 (In press).

TEACHING EXPERIENCE

- Program Design (TA) Spring 2017
- Technical Writing for Graduate (TA) Spring 2018 & Autumn 2018