# Yutai Hou

| Contact    |   | Room K1228, TIB Building, No. 2 Yikang Street, |                  |
|------------|---|--|------------------|
|            | <b>**</b> +86 18646539069   | Nangang District, Harbin, C                    | China            |
| Education  | Harbin Institute of Technology -                                      | Ph.D in CS   Advisor: Wanxiang Che             | 2017.7 - Present |
|            | Harbin Institute of Technology -                                      | Bachelor in CS   Advisor: Jiqing Han           | 2013.9 – 2017.7  |
| Experience | rience Research Intern - Microsoft Research Asia   Mentor: Yingce Xia |  | 2020.9 – Present |
|            | Working on Drug discovery with NL                                     | P and low-resource ML.                         |                  |
|            | Visiting Researcher - Northwester                                     | rn University (USA)   <i>Mentor: Han Liu</i>   | 2019.3 – 2018.6  |
|            | Working on Meta Learning for few-                                     | shot sequence labeling problems.               |                  |
|            | Research Intern - Tencent Al lab                                      | Mentor: Meng Fang                              | 2018.6 – 2018.10 |
|            | Working on low resource task-orier                                    | nted chat bot.                                 |                  |
|            | Research Intern - Microsoft Resea                                     | arch Asia   <i>Mentor: Chin-Yew Lin</i>        | 2016.7 – 2017.7  |
|            | Working on Data2Text, e.g., genera                                    | ating product description and sport news.      |                  |
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#### Publications •

- Yutai Hou, Yongkui Lai, Yushan Wu, Wanxiang Che, Ting Liu. Few-shot Learning for Multi-label Intent Detection (AAAI 2021, CCF A)
- Yutai Hou, Sanyuan Chen, Wanxiang Che, Cheng Chen, Ting Liu. C2C-GenDA: Cluster-to-Cluster Generation for Data Augmentation of Slot Filling (AAAI 2021, CCF A)
- Yutai Hou, Wanxiang Che, Yongkui Lai, Zhihan Zhou, Yijia Liu, Han Liu, Ting Liu. Few-shot Slot Tagging with Collapsed Dependency Transfer and Label-enhanced Task-adaptive Projection Network. (ACL 2020 CCF A)
- Yuxuan Wang, Yutai Hou, Wanxiang Che, Ting Liu. Static to Dynamic Word Representations: A Survey. (JMLC 2020 SCI)
- Sanyuan Chen, **Yutai Hou**, Yiming Cui, Wanxiang Che, Ting Liu, Xiangzhan Yu. Recall and Learn: Fine-tuning Deep Pretrained Language Models with Less Forgetting. (EMNLP 2020).
- Yutai Hou, Jiafeng Mao, Yongkui Lai, Cheng Chen, Wanxiang Che, Zhigang Chen, Ting Liu. FewJoint: A Few-shot Learning Benchmark for Joint Language Understanding (Preprint 2020)
- Yutai Hou, Meng Fang, Wanxiang Che, Ting Liu. A Corpus-free State2Seq User Simulator for Task-oriented Dialogue (CCL 2019 Best Poster Paper)
- Yutai Hou, Yijia Liu, Wanxiang Che, Ting Liu. Sequence-to-Sequence Data Augmentation for Dialogue Language Understanding. (COLING 2018 CCF B Citation 50+)
- Ruoxi Shi, Hongzhi Wang, Tao Wang, Yutai Hou, Yiwen Tang, Jianzhong Li, Hong Gao. Similarity Search Combining Query Relaxation and Diversification. (DASFAA 2017 CCF B).
- Jinpeng Wang, Yutai Hou, Yunbo Cao, Chin-Yew Lin. A Statistical Framework for Product Description Generation. (IJCNLP 2017)

#### **Projects**

• Meta Dialog Platform (MDP) (2020) - Participation: Team leader

A toolkit platform for NLP Few-Shot Learning tasks. Homepage: https://github.com/AtmaHou/MetaDialog

• Few-shot dialog understanding (2019) - Participation: Team leader

Commercial project with top domestic company on few-shot dialogue language understanding.

• Task-Oriented Dialog Research Progress Survey (2018) - Participation: Solely responsible.

A tool (1000+ stars on Github) traces the progress of dialog research: datasets & SOTA leaderboards. Homepage: https://github.com/AtmaHou/Task-Oriented-Dialogue-Research-Progress-Survey.

• DTP: Dialog Tech Platform (2018) - Participation: Platform design

A national award-wining project for building commercial chat-bot. Homepage: http://dtp-cloud.cn/

• Xiaodou voice assistant (2015) - Participation: Front end design & coding.

Intelligent voice assistant app. Award-winning work in IBM Bluemix developer contest

• Intelligent news robot (2015) - Participation: Leader of Android clients development.

News voice robot project with both PC and Android clients for Wujie Chuanmei Co. Ltd.

## Coding Skill PyTorch, Tensorflow, JavaScript, Django, Python, C++

### Leadership

- Responsible person, for self-running journal of the Computer Science School
- Class cadre, responsible for curriculum management and teacher-student communication

| Awards | National Scholarship   | 2020             |
|--------|--|------------------|
|        | Best poster paper of CCL2019   | 2019             |
|        | National University Internet Application Innovation Competition (3rd)  | 2018             |
|        | Microsoft Intern · Rising Star   | 2017             |
|        | HIT Outstanding Graduate   | 2017             |
|        | Top 100 Graduation Thesis  | 2017             |
|        | People Scholarship   | 2016, 2015       |
|        | Suzhou Industrial Park Scholarship                                     | 2016             |
|        | First Prize, National Mathematical Modeling Contest Northeast Division | 2015             |
|        | Outstanding Youth League Cadre/ member                                 | 2015, 2014, 2013 |
|        | Outstanding Student Cadre of the University, twice                     | 2015, 2014       |
|        | IBM Bluemix Developer Contest: Best Product Design Award, Mobile Group | 2015             |

Third Prize, University Group Outstanding Application Award