

CHUAN WEN

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EDUCATION

Tsinghua University

Sep 2020 - Present

Institute for Interdisciplinary Information Sciences

Ph.D student in Computer Science, advised by Prof. Yang Gao

Shanghai Jiao Tong University

Sep 2016 - June 2020

School of Electronic Information and Electricity Engineering

B.S. in Information Engineering (Graduate with honor)

Overall GPA: **3.86/4.3** Rank: **9/154**

AREAS OF INTERESTS

The robustness and safety of computer vision and policy learning, especially from the causality perspective.

PUBLICATION

[1] **Chuan Wen**, Jianing Qian, Jierui Lin, Jiaye Teng, Dinesh Jayaraman, Yang Gao. Fighting Fire with Fire: Avoiding DNN Shortcuts through Priming. Accepted by *ICML2022*

[2] Chia-Chi Chuang*, Donglin Yang*, **Chuan Wen***, Yang Gao. Resolving Copycat Problems in Visual Imitation Learning via Residual Action Prediction. Accepted by *ECCV2022*

[1] **Chuan Wen***, Jierui Lin*, Jianing Qian, Yang Gao, Dinesh Jayaraman. Keyframe-Focused Visual Imitation Learning. Accepted by *ICML2021*

[2] **Chuan Wen***, Jierui Lin*, Trevor Darrell, Dinesh Jayaraman, Yang Gao. Fighting Copycat Agents in Behavioral Cloning from Observation Histories. Accepted by *NeurIPS2020*

[3] **Chuan Wen**, Yujie Pan, Jie Chang, Ya Zhang, Siheng Chen, Yanfeng Wang, Mei Han, Qi Tian. Handwritten Chinese Font Generation with Collaborative Stroke Refinement. Accepted by *WACV2021*

[4] Haiwen Wang, Ruijie Wang, **Chuan Wen**, Shuhao Li, Yuting Jia, Weinan Zhang, Xinbing Wang. Author Name Disambiguation on Heterogeneous Information Network with Adversarial Representation Learning. Accepted by *AAAI2020*

[5] Xiaoyang Huo, **Chuan Wen**, Yuchen Yan, Ruijie Wang. RI-SSGE: A Framework with Rule Inference and Sentence Schema Graph Embedding for Knowledge Base Query. Accepted by *ACM TURC2019*

EXPERIENCES

Research Intern, Berkeley Artificial Intelligence Research Lab, UC Berkeley

Supervisors: Prof. Trevor Darrell, Prof. Yang Gao

Fighting Copycat Agents in Behavioral Cloning from Observation Histories *Aug 2019 - Aug 2020*

- Description: In POMDP, a common instance of causal confusion occurs when expert actions are strongly correlated over time: the imitator learns to cheat by predicting the expert's previous action. To combat this "copycat problem", we propose an adversarial approach to learn a feature representation that removes excess information about the previous expert action nuisance correlate.

Research Intern, Turing Sense, Turing AI Institute of Nanjing

Supervisor: Prof. Pingzhong Tang

The Development of a Wechat Mini Program named *Turing AI* *Jan 2019 - Jul 2019*

- Description: This work is to develop a Mini Program to identify the authenticity of luxuries bags, shoes and watches in the photos uploaded by users. I was in charge of studying the identification algorithms.

Research Assistant, Cooperative Medianet Innovation Center, SJTU

Supervisors: Prof. Ya Zhang, Prof. Siheng Chen

Handwritten Chinese Font Generation with Collaborative Stroke Refinement *Aug 2018 - Nov 2020*

- Description: This study shows how to transfer the Chinese characters to handwritten styles by both deep learning method and traditional morphological changes strategy, which can beat the state-of-the-art methods using 750 characters as training set.
- Contribution: I am the first author of this paper and propose the main part of the method. And the whole program and all the experiences are implemented by myself. After submitting my paper, I completed the writing and application of the patent on my own and developed a demo for *Ping An Technology*. And this work has aroused the interest of many companies, e.g. *VIVO* and *Ping An*.

Research Assistant, Intelligent Internet of Things, SJTU

Supervisors: Prof. Xinbing Wang, Prof. Weinan Zhang

Author Name Disambiguation on Heterogeneous Information Network *May 2018 - Sept 2018*

- Description: This study shows how to distinguish the papers written by the authors with the same names. We propose a novel generative adversarial framework as well as a self-training strategy to solve this problem.
- Contribution: I generate the entire data set *AceKG-AND*, prove by experiment that the GraphGAN is effective for this task and also conduct the experiments of baselines. And when applying the algorithm to Acemap system, I am in charge of the back-end development.

The Transformation of Natural Language to SPARQL Query in Knowledge Graph QA System *May 2018 - Sept 2018*

- Description: This study propose a novel framework for knowledge base QA, which combined rule inference and sentence schema graph embedding (RI-SSGE).
- Contribution: I generate the entire data set *AceQG*, propose the CRF for the first step in the whole network and also conduct the experiments of baselines. And when the framework is applied to Acemap system, I complete part of the back-end development.

The Construction of Academic Knowledge Graph AceKG

Jan 2018 - Mar 2018

- Description: This work built an academic knowledge graph AceKG, supported by Acemap. It 114.30 million academic entities based on a consistent ontology, including 61,704,089 papers, 52,498,428 authors, 50,233 research fields, 19,843 academic institutes, 22,744 journals, 1,278 conferences and 3 special affiliations.

HONORS & AWARDS

Toyota Scholarship	2021
Outstanding Graduates	2020
Hua Wei Scholarship (Top 3)	2018
School B Scholarship (Top 5%)	2017,2018

TECHNICAL STRENGTHS

Computer Languages	C/C++, Python
Deep Learning Framework	Tensorflow, Keras, Pytorch

OTHERS

Reviewer Service CVPR 2022, ICML 2022, ECCV 2022.