# Haonan Chen

chenhaonan1995@gmail.com ♦ (+1) 9198841656 ♦ https://chaonan99.github.io

## **EDUCATION**

#### University of North Carolina, Chapel Hill

Dec. 2019

M.S. in Department of Computer Science

Advisor: Prof. Ron Alterovitz (Co-advised by Prof. Mohit Bansal)

Thesis: Enabling Robots to Understand Incomplete Natural Language Instructions Using Commonsense

Reasoning

Tsinghua University

Jul. 2017

Bachelor of Engineering, Dept. of Automation

Thesis: Merging Lane Group Decision Making Based on Vehicle Infrastructure Cooperation

GPA: 88.77/100 Ranking: 17/139

## WORKING EXPERIENCE

TikTok Inc., San Jose, CA, USA

Title: Research Engineer

Dec. 2019 - present

- Developing agent system and algorithms that facilitates music creation for people with all levels of music knowledge (Product: Ripple https://shorturl.at/xQUX1)
- Conducting research on music generation using language model, music popularity prediction, music video classification, etc.
- Developing in-house digital audio workstation (DAW) engine and support it's usage in in-house apps.
- Developing in-house music digital signal processing SDK and support it's usage for in-house apps (Douyin, TikTok, CapCut, Xigua, etc.) and external business partners.

Bytedance Inc., Palo Alto, CA, USA

May 2019 - Aug. 2019

Title: Research Intern

• Develop instrumental audio synthesis model given symbolic music representation such as piano roll.

Megvii Inc. (Face ++), Beijing, China

Sept. 2016 - Feb. 2017

Title: Research Intern

• Research on person re-identification in surveillance video.

University of Michigan

Jun. 2016 - Sept. 2016

Title: Research Intern

### **PUBLICATION**

**Haonan Chen**, Hao Tan, Alan Kuntz, Mohit Bansal, Ron Alterovitz. "Enabling Robots to Understand Incomplete Natural Language Instructions Using Commonsense Reasoning." IEEE International Conference on Robotics and Automation (ICRA), 2020. [pdf]

Yixin Nie, **Haonan Chen**, Mohit Bansal. "Combining Fact Extraction and Verification with Neural Semantic Matching Networks". Proceedings of AAAI 2019, Honolulu, Hawaii.

Oral Presentation at Fact Extraction and Verification (FEVER) Workshop, EMNLP 2018, Brussels, Belgium.