# Hyundong Justin Cho Ph.D. student in Computer Science

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#### **OBJECTIVE**

■ NLP research internship for Summer 2022

■ Visa status: US citizen

### **EDUCATION**

# **University of Southern California (USC)**

2020.9 - Present

Ph.D. in Computer Science, Viterbi School of Engineering

Los Angeles, CA, USA

Advisor: Prof. Jonathan May

Machine Learning, Natural Language Processing

# Hong Kong Unversity of Science and Technology (HKUST)

2013.9 - 2019.6

B.Eng. in Computer Science, School of Engineering

Graduated with First Class Honors

Hong Kong, HK

## **PUBLICATIONS**

1. Probing Commonsense Explanation in Dialogue Response Generation

P. Zhou, P. Jandaghi, **Hyundong Cho**, Y. Lin, J. Pujara, X. Ren. in Proceedings of EMNLP 2021 Findings

2. Agenda Pushing in Email to Thwart Phishing

Hyundong Cho, G. Bartlett, M. Freedman. in Proceedings of ACL 2021 Doc2Dial Workshop

3. Grounding Conversations with Improvised Dialogues

Hyundong Cho, J. May.

in Proceedings of ACL 2020

#### **OTHERS**

1. CheckDST: Measuring Real-World Generalization of Dialogue State Tracking Performance Hyundong Cho, C. Sankar, C. Lin, A. Celikyilmaz, S. Shayandeh, J. May, A. Beirami. 2021 Arxiv preprint, submitted for review

2. Viola: A Topic Agnostic Generate-and-Rank Dialogue System

Hyundong Cho, B. Shbita, K. Shenoy, S. Liu, N. Patel, H. Pindikanti, J. Lee, J. May. 2021 Alexa Prize Socialbot Grand Challenge 4 Proceedings

## WORK EXPERIENCE

Meta AI

2021.8 - Present

Research Intern, Conversational AI Research. Manager: Dr. Ahmad Beirami

Menlo Park, CA, USA

■ CheckDST: quantified and compared robustness of dialogue state tracking models through various perturbations

Stitch Fix Inc.

2020.6 - 2020.8

Data Science Intern. Manager: Dr. Anna Schneider

San Fransisco, CA, USA

■ Customer reviews Summarization: Surfaced representative client comments to facilitate purchasing decisions for merchandising partners with sentence embeddings and clustering algorithms.

# **USC Information Sciences Institute (ISI) Natural Language Group (NLG)**

2019.9 - 2020.6

Programmer Analyst

Los Angeles, CA, USA

■ Active Social Engineering Defense (ASED) program: Built an automatic phishing email reply system with a finite state transducer and a neural dialogue model. The program is sponsored by the Defense Advanced Research Projects Agency (DARPA).

Summer Research Intern, PI: Prof. Jonathan May

2019.6 - 2019.9

■ **Structure-to-text:** automatically create baseball recap articles from structured data, play-by-play records of Major League Baseball matches on retrosheet.org

Undergraduate Research Assistant, PI: Prof. Jonathan May

2018.9 - 2019.2

■ Improvised dialogues: Constructed the Spontaneanation Pairs of Learnable ImprovisatioN corpus, a collection of "Yes, and" type dialogue acts from improv podcasts for training more engaging dialogue models. Project page

Imago.ai 2018.6 - 2018.9

Artificial Intelligence Researcher

Hong Kong, HK

- Question Answering: Trained a BiDAF question answering model augmented with self-attention mechanism with MS-MARCO and SQuAD V2 datasets and evaluated performance with BLEU and ROUGE metrics.
- **Production deployment:** Deployed the trained model with a Flask app on the company's production server.

#### **PROJECTS**

## Dialogue Agent for Reducing Malicious Acts (DARMA)

2021.12 - Present

- Led the development of dialogue agents that moderate multilingual conversations in social media. PI: Prof. Jonathan May
- Part of AI Exploration: Civil Sanctuary program sponsored by DARPA.

## Alexa Prize Socialbot Grand Challenge 4

2020.11 - 2021. 6

- Team leader of Viola, the first student-led team to compete from USC. Managed ten PhD, Masters and undergraduate students. Faculty advisor: Professor Jonathan May
- Developed and deployed a scalable and versatile socialbot through AWS with a combination of finite state machines and end-to-end chit-chat neural models and QA components.

## Inflo: News Data Processing for Fake News Detection

2018.9 - 2019.4

- Final Year Project (year-long senior level team project), Supervisor: Kenneth Wai-Ting Leung
- Developed a novel platform for a versatile fake news detection service with a multi-modal fake news detection neural network using PyTorch, Flask, and JavaScript.
- Finalist for Best Final Year Project. Project link

#### **AWARDS**

Viterbi School of Engineering/Graduate School Fellowship for Incoming Students Academic Excellence Recruitment Scholarship (Full Tuition), HKUST

2013.9 - 2019.6

Reaching Out Award, HKSAR Government Scholarship Fund

2019.2

Champion of CodeIT Suisse Coding Challenge, Credit Suisse APAC Region

2017.9

2020

Dean's List, School of Engineering, HKUST

2013.12, 2015.6, 2017.12, 2018.6, 2019.6

# PROFESSIONAL SERVICES

Program Committee Member (Reviewer):

Main conferences: EMNLP2021, ACL2021, EMNLP2020