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

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## 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                                          *Hong Kong, HK*
Graduated with First Class Honors

## 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

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| Viterbi School of Engineering/Graduate School Fellowship for Incoming Students | **2020** |
| 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** |
| 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