HUNG-TING CHEN

८ (+1)7372742457 ■ hung-ting.chen@nyu.edu **⑤** timchen0618.github.io **⑥**timchen0618

RESEARCH INTEREST

Natural Language Processing, Machine Learning. More specifically, I am interested in building systems that can understand language and respond to human queries accurately.

EDUCATION

B.S. in Electrical Engineering, National Taiwan University (NTU)

Sept. 2016 - June 2020

Overall GPA: 4.26/4.30 (No. 4/177)

M.S. in Computer Science, University of Texas at Austin (UT Austin)

Aug. 2021 - May 2023

Overall GPA: 3.95/4.00

Overall GFA: 5.95/ 4.00

Ph.D. in Computer Science, University of Texas at Austin (UT Austin) Aug. 2023 - Aug. 2024

Overall GPA: 4.00/ 4.00

Ph.D. in Computer Science, New York University

Aug. 2024 - Present

Overall GPA: 4.00/ 4.00

advised by **Prof. Eunsol Choi** (Aug. 2021 - Present)

PUBLICATION

- Hung-Ting Chen, Eunsol Choi. "Open-World Evaluation for Retrieving Diverse Perspectives" The 2025
 Conference of the North American Chapter of the Association for Computational Linguistics (NAACL 2025)
- · Hung-Ting Chen, Fangyuan Xu*, Shane A. Arora*, Eunsol Choi. "Understanding Retrieval Augmentation for Long-Form Question Answering" Conference on Language Modeling (COLM 2024)
- · Ge Gao*, **Hung-Ting Chen***, Yoav Artzi, Eunsol Choi. "Continually Improving Extractive QA via Human Feedback" The 2023 Conference on Empirical Methods in Natural Language Processing (EMNLP 2023)
- Hung-Ting Chen, Michael J.Q. Zhang, Eunsol Choi. "Rich Knowledge Sources Bring Complex Knowledge Conflicts: Recalibrating Models to Reflect Conflicting Evidence" The 2022 Conference on Empirical Methods in Natural Language Processing (EMNLP 2022)
- · Shane Arora*, Marzena Karpinska*, **Hung-Ting Chen**, Ipsita Bhattacharjee, Mohit Iyyer, Eunsol Choi. "CaLMQA: Exploring culturally specific long-form question answering across 23 languages" *The 63rd Annual Meeting of the Association for Computational Linguistics* (**ACL 2025**)
- · **Hung-Ting Chen***, Yu-Chieh Chao*, Ta-Hsuan Chao*, Wei-Yun Ma. "Predict and Use Latent Patterns for Short-Text Conversation" *The Fourth Workshop on Reasoning and Learning for Human-Machine Dialogues at AAAI 2021*

(*indicates equal contribution)

INDUSTRY RESEARCH EXPERIENCE

Salesforce AI Research (Manager: Semih Yavuz)

Improving Multi-hop Reasoning with Reasoning Chain Aggregation

May 2024 - Aug. 2024

- · Designed reasoning chains that could help improve multi-hop reasoning of LLMs
- · Developed self-consistency-inspired aggregation scheme on various types of reasoning chains

Institute of Information Science, Academia Sinica (Advisor: Prof. Wei-Yun Ma)

Data-to-Text Generation System [Website Link]

July 2020 - July 2021

- · Improved attribute mention accuracy by 17% with template-based transformer model
- · Enhanced generation quality of the system via template optimization

Dialogue Generation with Latent Pattern [Github Link] [Arxiv Link]

June 2019 - June 2020

- · Incorporated information from a latent sentence or part-of-speech sequence predicted by model
- · Obtained 36.42 BLEU-1 score on Weibo Benchmark Dataset

RESEARCH EXPERIENCE

Computer Science Department, New York University (Advisor: Prof. Eunsol Choi)

Iterative Retrieval System

Nov. 2024 - Present

- · Devise architecture modifications and training pipelines for fine-tuning an iterative retriever
- Enhance comprehensiveness in retrieving a list of answers by 10%

Improving Retrieval Diversity

Sept. 2024 - Sept. 2025

- · Established the limitation of single-query vector retrievers on capturing diverse target distributions
- · Developed a novel retriever that outputs multiple query embeddings autoregressively

Computer Science Department, UT Austin (Advisor: Prof. Eunsol Choi)

Evaluation of Retrieval Diversity [Paper Link]

Sept. 2023 - May 2024

- · Constructed a benchmark for evaluating whether diverse perspectives are retrieved for subjective questions
- · Showed the incapability of existing retrievers to retrieve diverse perspectives and proposed improvements

Retrieval Augmentation in Long-Form QA [Paper Link]

Oct. 2022 - Sept. 2023

- · Studied how three LMs (WebGPT, GPT-3.5, and Alpaca) use retrieved documents in-context
- · Collected human annotations on whether answers are supported by the reference documents in RAG setting

Continual Learning on Extractive QA [Paper Link]

July 2022 - May 2023

- \cdot Collect multiple batches of user feedback to a QA system with Amazon Mechanical Turk
- · Improve accuracy of answers by 11% using bandit learning

Knowledge Conflicts in Open-Retrieval QA [Paper Link]

Sept. 2021 - June 2022

- · Investigated knowledge conflicts between different knowledge sources in open-retrieval QA setting
- · Showed that models rarely hallucinate when provided with a high-quality retriever
- · Trained a separate calibrator to refrain the model from answering questions with knowledge conflicts

Speech Processing Laboratory, NTU (Advisor: Prof. Lin-Shan Lee & Hung-Yi Lee)

Entity-Aware Automatic Text Summarization [Github Link]

Sept. 2018 - June 2020

- · Implemented a transformer-based neural model with pointer-generator network to summarize text
- · Incorporated named-entity information into summarization model with modified attention mechanism
- · Introduced entity-aware embedding to enhance ROUGE-1, -2 scores by 5% and 8%

Meta-Learning on Speech Recognition

Feb. 2020 - June 2020

- · Investigated methods of meta-learning and implemented a paper in PyTorch [Github Link]
- · Researched meta-learning methods on cross-accented automatic speech recognition

AWARDS

- · 3 * Academic Excellence Award (top 5% in department in a semester)
- · 2nd Place in NTUEE Undergraduate Innovation Award
- · 2nd Place in Small Data Training for Medical Images Contest (held by HTC Taiwan)

SERVICES

Teaching Assistant (TA) for Signals and Systems (NTU)

Feb. 2019 - June 2019

- · Graded assignments and two exams
- · Answered questions from students during weekly office hours

TA for Deep Learning for Human Language Processing (NTU)

Feb. 2020 - June 2020

· Designed and graded programming assignment on the topic Source Separation

TA for Natural Language Processing (UT Austin)

Jan. 2022 - May 2022

- · Graded assignments, final project and final exam
- · Led a review session and answered questions from students during weekly office hours

Reviewer

· ICLR 2026, ARR (July 2025, Feb 2025, Oct 2024, Aug 2024, Feb 2024), EMNLP (2022, 2023), ACL 2023, AKBC 2022, KnowledgeLM @ ACL2024

COURSE PROJECTS

Improving VQA Model Robustness with Adversarial Inputs [Report Link] Jan. 2022 - May 2022

- · Augmented the training set with adversarial inputs using paraphrase generation and adversarial attack
- · Improved accuracy of various VQA backbone models on VQA-CP test set by 4-9%

Neural-Based Medical Image Analysis – Disease Detection [Github Link] Dec. 2018 - Jan. 2019

- · Developed a neural model identifying 14 diseases on NIH chest X-Ray dataset
- · Led the team of three people, assigned tasks, and designed project structure
- · Achieved 2nd place in "Small Data Training for Medical Images Contest"

Multi-Source Domain Adaptation on DomainNet [Poster Link]

May. 2019 - June. 2019

- · Modified Adversarial Discriminative Domain Adaptation (ADDA) into FuzzyADDA
- · Implemented Maximum Classifier Discrepancy (MCD) method
- · Ranked 1st and 2nd in public and private leaderboards in Kaggle competition out of 20 teams

TECHNICAL STRENGTHS

Programming Languages C++, Python, Matlab

Machine Learning PyTorch, Keras, Tensorflow, Google Cloud VM, Huggingface, OpenAI APIs

Web Development

HTML Flesh Lyappoint Finebage Hereby

Web Development HTML, Flask, Javascript, Firebase, Heroku

Data Collection MTurk, Prolific

Languages Mandarin (Native), English (Fluent, TOEFL iBT: 109)

Last updated: Oct 7, 2025