Nayeon Lee

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EDUCATION

Hong Kong University of Science and Technology   Hong Kong, HK
Supervised by Pascale Fung   *Aug. 2017 – Present*

- PhD Candidate in Electronic and Computer Engineering
- Bachelor of Engineering in Computer Science Engineering (Minor: Big Data Technology)

EXPERIENCE/SELECTED PROJECTS

NVIDIA   Feb 2022 – June 2022
Research Intern @ Applied Deep Learning Research Team   *(Remote) Sunnyvale, CA*

- [**LM Factuality**]: Working on improving the factuality of LM generation

Facebook AI   Sept 2019 – Jan 2020
Research Intern @ AI Integrity Team   *Seattle, WA*

- [**Fact-checking**]: Explored a way of leveraging the power of large pre-trained language-model as knowledge base in the fact-checking setup. Probed the BERT to "generate" evidence for fact-checking task.
- [**Misinformation Detection**]: Proposed a unified misinformation model that is helpful for few-shot learning of unseen misinformation tasks/datasets and has improved generalizability to unseen events.

Hong Kong University of Science and Technology   Aug. 2017 – Present
PhD Candidate   *Hong Kong, HK*

- [**Chatbot Bias**]: Explored approaches to measure social bias (gender, racial, political) in chatbot generations by leveraging stereotype knowledge.
- [**Fact-Checking**]: Proposed a novel way of leveraging language model perplexity for the few-shot myth debunking. With only two training samples, our methodology can already outperform the fine-tuning-based baselines.
- [**Misinformation Detection**]: Incorporated semi-supervised approach (pseudo-labelling) to deal with hyper-partisanship detection model.

Credit Suisse   June 2016 – Aug 2016
Software Engineering Intern   *Hong Kong, HK*

- Developed a REST API using FastAPI and PostgreSQL to store data from learning management systems
- Developed a full-stack web application using Flask, React, PostgreSQL and Docker to analyze GitHub data

PROFESSIONAL ACTIVITY

Reviewer
- ACL 2020, EMNLP 2020, NAACL2020, ACL 2021, EMNLP 2021, WWWJ2021, ARR-June~Oct

PUBLICATIONS

- [**NAACL2022**] "NeuS: Neutral Multi-News Summarization for Mitigating Framing Bias", **Nayeon Lee**, Yejin Bang, Tiezheng Yu, Andrea Madotto, Pascale Fung, NAACL2022 (Long)

- [**SIGDIAL2021**] "Assessing Political Prudence of Open-domain Chatbots", Yejin Bang, **Nayeon Lee**, Etsuko Ishii, Andrea Madotto, Pascale Fung, SIGDIAL2021 (Short)

- [**NAACL2021**] "Towards Few-Shot Fact-Checking via Perplexity", **Nayeon Lee***, Yejin Bang*, Andrea Madotto, Pascale Fung, NAACL2021 (Long)

- [**NAACL2021**] "On Unifying Misinformation Detection", **Nayeon Lee**, Belinda Z. Li, Sinong Wang, Pascale Fung, Hao Ma, Wen-tau Yih and Madian Khabsa, NAACL2021 (Short)

- [**ACL2020**] "Language Models as Fact Checkers?", **Nayeon Lee**, Belinda Z Li, Sinong Wang, Wen-tau Yih, Hao Ma, Madian Khabsa, ACL2020 FEVER

- [**NAACL2019**] "Hyperpartisan News Detection by de-noising weakly-labeled data", **Nayeon Lee***, Zihan Liu*, Pascale Fung, NAACL2019 Semeval

- [**ACL2019**] "Exploring social bias in chatbots using stereotype knowledge", **Nayeon Lee**, Andrea Madotto, Pascale Fung, ACL2019 WNLP

- [**ACL2019**] "Understanding the Shades of Sexism in Popular TV Series", **Nayeon Lee**, Yejin Bang, Jamin Shin, Pascale Fung, ACL2019 WNLP

- [**EMNLP2018**] "Improving Large-Scale Fact-Checking using Decomposable Attention Models and Lexical Tagging", **Nayeon Lee***, Chien-Sheng Wu*, Pascale Fung, EMNLP2018 (Short)

- [**Interspeech2017**] "Emojive! Collecting Emotion Data from Speech and Facial Expression using Mobile Game App", Jiho Park, **Nayeon Lee**, Pascale Fung, Interspeech2017 (Demo)

Honors & Awards

4-year Postgraduate Studentship | *HKUST*	2017 – Present
Dean's List Award | *HKUST*	2017
Women Techmakers Scholarship | *Google*	2017
Google Anita Borg Birthday Celebration Prize | *HackUST*	2016

Technical Skills

Languages: Python, Java, JavaScript, HTML/CSS
Frameworks: React, Node.js, Flask
Libraries: PyTorch, TensorFlow, pandas, NumPy, Matplotlib