

Nayeon Lee

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EDUCATION

Hong Kong University of Science and Technology

Supervised by Pascale Fung

Hong Kong, HK

Aug. 2017 – Present

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

EXPERIENCE/SELECTED PROJECTS

Facebook AI

Research Intern

Sept 2019 – Jan 2020

Seattle, WA

- Worked with AI Integrity Team at Facebook on misinformation detection and fact-checking research.
- **[Misinformation Detection]**: Proposed a unified model that can address multiple types of misinformation - rumour, fake news, news bias and click-bait
- **[Fact-checking]**: Explored a way of leveraging the power of the language-model as knowledge base in the fact-checking setup.

The Centre for Artificial Intelligence Research

Graduate Research Student

Aug. 2017 – Present

Hong Kong, HK

- I worked on various research problems for social good under supervision of Prof. Pascale Fung.
- **[Fact-Checking]**: Proposed a novel way of leveraging language model perplexity for the myth debunking. We focused on the COVID-19 myths to help address the increasing problem of COVID-19-related false information.
- **[Gender Bias]**: Proposed an approach to understand and measure social bias in chatbots by leveraging stereotype knowledge
- **[Hyper-partisanship Detection]**: Incorporated semi-supervised approach (pseudo-labelling) to deal with hyper-partisanship detection model.

Credit Suisse

Software Engineering Intern

June 2016 – Aug 2016

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

PUBLICATIONS

- “Misinformation Has High Perplexity”, **Nayeon Lee***, Yejin Bang*, Andrea Madotto, Pascale Fung, under-review at NAACL2021
- “On Unifying Misinformation Detection”, **Nayeon Lee**, Belinda Z. Li, Sinong Wang, Pascale Fung, Hao Ma, Wen-tau Yih and Madian Khabsa, under-review at NAACL2021
- “Language Models as Fact Checkers?”, **Nayeon Lee**, Belinda Z Li, Sinong Wang, Wen-tau Yih, Hao Ma, Madian Khabsa, ACL2020 FEVER
- “Hyperpartisan News Detection by de-noising weakly-labeled data”, **Nayeon Lee***, Zihan Liu*, Pascale Fung, NAACL2019 Semeval
- “Exploring social bias in chatbots using stereotype knowledge”, **Nayeon Lee**, Andrea Madotto, Pascale Fung, ACL2019 WNLP
- “Understanding the Shades of Sexism in Popular TV Series”, **Nayeon Lee**, Yejin Bang, Jamin Shin, Pascale Fung, ACL2019 WNLP
- “Improving Large-Scale Fact-Checking using Decomposable Attention Models and Lexical Tagging”, **Nayeon Lee***, Chien-Sheng Wu*, Pascale Fung, EMNLP2018 (short)
- “Emoji! 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 <i>HKUST</i>	2017 – Present
Dean's List Award <i>HKUST</i>	2017
Women Techmakers Scholarship <i>Google</i>	2017
Google Anita Borg Birthday Celebration Prize <i>HackUST</i>	2016

TECHNICAL SKILLS

Languages: Python, Java, JavaScript, HTML/CSS

Frameworks: React, Node.js, Flask

Libraries: PyTorch, TensorFlow, pandas, NumPy, Matplotlib