Ming Shan Hee

Ph.D. Candidate, Information System Technology and Design (ISTD)
Singapore University of Technology and Design (SUTD)
8 Somapah Rd, Singapore 487372
Email: mingshan_hee@mymail.sutd.edu.sg

EXPERIENCE

Research Intern   05/2019 - 08/2019
Preferred.AI

- Developed an emotion detection model using Tensorflow
- Deployed a quantised emotion detection model to iOS, Web and Raspberry Pi using Tensorflow Lite (https://faceinmotion.preferred.ai)

Research Assistant   12/2017 - 05/2019
Living Analytic Research Center

- Trained and deployed two regression models for food calories prediction
- Developed a social network visualisation website
- Co-published a research paper "Linky: Visualizing User Profile Linkage Across Multiple Online Social Networks (Demo)" at International Conference on Data Mining Workshops (ICDMW'18), Singapore, 2018.

EDUCATION

Ph.D. (Information Systems Technology and Design)   01/2021 - Present
Singapore University of Technology and Design

- Awarded with Presidential Doctoral Fellowship Scholarship

Bachelor of Science (Information Systems)   08/2017 - 12/2020
Singapore Management University

Diploma in Information System   04/2012 - 04/2015
Singapore Polytechnic

PUBLICATIONS

1. Zhiqiang Hu, Thao Thanh Nguyen, Yujia Hu, Chia-Yu Hung, **Ming Shan Hee**, Chun Wei Seah, and Roy Ka-Wei Lee. 2024. "Contrastive Disentanglement for Authorship Attribution". In Companion Proceedings of the ACM Web Conference 2024 (WWW '24 Companion). Association for Computing Machinery, New York, NY, USA

2. **Ming Shan Hee**, Karandeep Singh, Charlotte Ng Si Min, Kenny Tsu Wei Choo, and Roy Ka-Wei Lee. 2024. "Brinjal: A Web-Plugin for Collaborative Hate Speech Detection". In Companion Proceedings of the ACM Web Conference 2024 (WWW '24 Companion). Association for Computing Machinery, New York, NY, USA

3. Han Wang, Nirmalendu Prakash, Nguyen Khoi Hoang, **Ming Shan Hee**, Usman Naseem and Roy Ka-Wei Lee. 2023. "Prompting Large Language Models for Topic Modeling". In 2023 IEEE International Conference on Big Data (Big Data)

4. **Ming Shan Hee**, Aditi Kumaresan, Nguyen Khoi Hoang, Nirmalendu Prakash, Rui Cao and Roy Ka-Wei Lee. 2023. "MATK: The Meme Analytical Toolkit". In Proceedings of the 31st ACM International Conference on Multimedia (MM '23).

5. Rui Cao, **Ming Shan Hee**, Adriel Kuek, Wen-Haw Chong, Roy Ka-Wei Lee, and Jing Jiang. 2023. "Pro-Cap: Leveraging a Frozen Vision-Language Model for Hateful Meme Detection". In Proceedings of the 31st ACM International Conference on Multimedia (MM '23).

6. Nirmalendu Prakash, Han Wang, Nguyen Khoi Hoang, **Ming Shan Hee**, and Roy Ka-Wei Lee. 2023. "PromptMTopic: Unsupervised Multimodal Topic Modeling of Memes using Large Language Models". In Proceedings of the 31st ACM International Conference on Multimedia (MM '23).

7. **Ming Shan Hee**, Wen-Haw Chong, and Roy Ka-Wei Lee. 2023. "Decoding the Underlying Meaning of Multimodal Hateful Memes". In Proceedings of the 32nd International Joint Conference on Artificial Intelligence (IJCAI-23).

8. Han Wang*, **Ming Shan Hee***, Md Rabiul Awal, Kenny Tsu Wei Choo, and Roy Ka-Wei Lee. 2023. "Evaluating GPT-3 Generated Explanations for Hateful Content Moderation." In Proceedings of the 32nd International Joint Conference on Artificial Intelligence (IJCAI-23).

9. Nirmalendu Prakash, **Ming Shan Hee**, and Roy Ka-Wei Lee. 2023. TotalDefMeme: A "Multi-Attribute Meme dataset on Total Defence in Singapore". In Proceedings of the 14th Conference on ACM Multimedia Systems (MMSys '23). Association for Computing Machinery, New York, NY, USA, 369–375. https://doi.org/10.1145/3587819.3592545

10. **Ming Shan Hee**, Roy Ka-Wei Lee, and Wen-Haw Chong. 2022. "On Explaining Multimodal Hateful Meme Detection Models". In Proceedings of the ACM Web Conference 2022 (WWW '22). Association for Computing Machinery, New York, NY, USA, 3651–3655. https://doi.org/10.1145/3485447.3512260

11. Roy Ka-Wei Lee, **Ming Shan Hee**, Philips Kokoh Prasetyo, and Ee-Peng Lim. (2018). "Linky: Visualizing User Identity Linkage Results for Multiple Online Social Networks." 1453-1458. 10.1109/ICDMW.2018.00207.

ACHIEVEMENT

Singapore Data Science Consortium (SDSC) Dissertation Research Fellowship   2023

SUTD Presidential Doctoral Fellowship Scholarship   2020

SERVICE ROLES AND ACADEMIC ACTIVITIES

Conference Reviewer
EMNLP 2023, WWW 2024, MM4SG 2024, MM 2024, ASONAM 2024 (Program Committee)

Teaching Assistant, 50.040 Natural Language Processing   05/2022 - 08/2022
Singapore University of Technology and Design
- Prepared and graded assignments focusing on Part-Of-Speech (POS) tagging for 20 - 30 junior and senior level undergraduates.

Adjunct Lecturer, Web Application Development   10/2019 - 12/2019
Singapore Polytechnic
- Prepared lectures and assignments focusing on Web application development (HTML, CSS, C#, .NET Core 2.1) for 42 second-year students

Adjunct Lecturer, Application Development   10/2018 - 12/2018
Singapore Polytechnic
- Prepared lectures and assignments focusing on native Window application development (Windows Form and Windows Presentation Foundation) for 20 first-year students