Ming Shan Hee

Ph.D. Student, Information System and Design (ISTD)
Singapore University of Technology and Technology (SUTD)
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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 predictions
- 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. **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).

2. 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).

3. 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).

4. **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).

5. 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).

6. 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

7. **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

8. 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.

SERVICE ROLES AND ACADEMIC ACTIVITIES

Conference Reviewer   2023
EMNLP 2023

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