



LIN TIAN

RMIT University, VIC, Australia
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EDUCATION

PhD in Computer Science | RMIT University | 2020 - Now | Vice-Chancellor's Scholarship

Honours of Computer Science | RMIT University | 2019 - 2019 | First Class Honours

Master of Engineering | University of Melbourne | 2012-2013

Bachelor of Information Technology and System | Monash University | 2009 – 2011

RESEARCH FOCUS

My research focus on misinformation detection on social media platforms via deep learning approaches in unsupervised or semi-supervised setting, i.e. a learning scenario where the supervision signal for model training is not available or scarce. Social media misinformation can mislead the public and cause significant economic and social disruption. With the knowledge of deep learning and machine learning techniques, we aim to build multiple novel solutions for multi-lingual multi-modal misinformation detection on social platforms.

PUBLICATIONS

Tian, L., Zhang, X. and Lau, J.H. MetaTroll: Few-shot Detection of State-Sponsored Trolls with Transformer Adapters. In Proceedings of the Web Conference 2023 (WWW 2023), Austin, USA.

Tian, L., Zhang, X., Kim, M.H. and Biggs, J. Task and Sentiment Adaptation for Appraisal Tagging. In Proceedings of the 17th Conference of the European Chapter of the Association for Computational Linguistics (EACL 2023), Dubrovnik, Croatia.

Tian, L., Zhang, X. and Lau, J.H., 2022, DUCK: Rumour Detection on Social Media by Modelling User and Comment Propagation Networks. In Proceedings of the 2022 Conference of the North American Chapter of the Association for Computational Linguistics: Human Language Technologies (NAACL HLT 2022), pages 4939—4949.

Tian, L., Zhang, X. and Lau, J.H., 2021, September. Rumour Detection via Zero-Shot Cross-Lingual Transfer Learning. In Joint European Conference on Machine Learning and Knowledge Discovery in Databases (pp. 603-618). Springer, Cham.

Tian, L., Zhang, X. and Peng, M., 2020, April. FakeFinder: twitter fake news detection on mobile. In Companion Proceedings of the Web Conference 2020 (pp. 79-80).

Tian, L., Zhang, X. and Lau, J.H., 2020. #Democrats are destroying America: Rumour analysis on twitter during COVID-19. In Proceedings of the 5th International Workshop on Mining Actionable Insights from Social Networks: Special Edition on Dis/Misinformation Mining from Social Media (MAISoN 2020).

Tian, L., Zhang, X., Wang, Y. and Liu, H., 2020, April. Early detection of rumours on twitter via stance transfer learning. In European Conference on Information Retrieval (pp. 575-588). Springer, Cham.

WORKING EXPERIENCE

Multilingual Misinformation Detection with linguistic frameworks (Melbourne, VIC)

Research Assistant | March 2022 – Now

Key technologies: Transformers, Adapters, Pytorch, Multilingual language models

- Built a deep learning model to identify opinion and emotion phrases based on a linguistic framework
- Working on adopt the linguistic framework for multilingual misinformation detection task

Gee Chatbot (Melbourne, VIC)

Research Assistant | June 2021 – November 2022

Key technologies: GPT-3, Django, Python, Cloud Service, Git, Pytorch

- Working on prompt-based training on text generation
- Built and deployed a GPT-3 based chatbot with Georgia's personality to explore ego/self

HeroBoyfriend (Melbourne, VIC)

Software Engineer | May 2016 – August 2017

Key technologies: Javascript, ReactJS, MeteorJS, Machine Learning, Python, Wit.AI, ElasticSearch, MongoDB, MySQL, Docker, Git, Jira

- Built a mobile application by using ReactJS and MeteorJS
- Deployed on Apple and Android OS. App Name: HeroBoyfriend
- Working on automation test and in charge of the automation application deployment

CoreMind (Melbourne, VIC)

Software Engineer | Sep 2014 – April 2016

Key technologies: Python, PostgreSQL, Django, CMS, Bootstrap, JQuery, MeteorJS, MongoDB, Ansible

- Working in a team under Agile software development spirit to build up a complex digital product by using Django framework
- Website: <https://digitallicenceplus.org/>

OTHER EXPERIENCE

- Melbourne Marathon Festival Half Marathon finisher – 2016, 2018, 2019, 2021, 2022
- Great Ocean Road Marathon: Half Marathon finisher - 2016, 2019, 2021, 2022
- Melbourne Amazing Race: Finisher at 36th Position – 2013
- University of Melbourne Endeavour Design Expo: Volunteer – 25th October, 2012
- Australian University Games: Swimming – July 2012