

TIANLE WANG

✉ tiw054@ucsd.edu · ☎ (+1) 858-531-8206 · 🌐 wtl666wtl · 🏠 Home Page

EDUCATION

University of California, San Diego (UCSD)

La Jolla, CA, USA

Master of Science in Data Science

Sept. 2023 – Mar. 2025 (Expected)

- Advised by Prof. Jingbo Shang
- My research interests lie in natural language processing and broad machine learning
- GPA: 4.0/4.0

Shanghai Jiao Tong University (SJTU)

Shanghai, China

Bachelor of Engineering in Computer Science

Sept. 2019 – Jun. 2023

- Member of **ACM Honors Class**, which is an elite program for top 5% talented students
- GPA: 3.7/4.3

PUBLICATION

1. **Tianle Wang**, Zihan Wang, Weitang Liu and Jingbo Shang “WOT-Class: Weakly Supervised Open-world Text Classification”, *CIKM 2023*
2. Zihan Wang*, **Tianle Wang***, Dheeraj Mekala and Jingbo Shang “A Benchmark on Extremely Weakly Supervised Text Classification: Reconcile Seed Matching and Prompting Approaches”, *ACL 2023, Findings*
3. Tianxing He, Jingyu Zhang, **Tianle Wang**, Sachin Kumar, Kyunghyun Cho, James Glass and Yulia Tsvetkov “On the Blind Spots of Model-Based Evaluation Metrics for Text Generation”, *ACL 2023*
4. Mengke Zhang, Tianxing He, **Tianle Wang**, Lu Mi, Fatemehsadat Mireshghallah, Binyi Chen, Hao Wang, Yulia Tsvetkov “LatticeGen: A Cooperative Framework Which Hides Generated Text in A Lattice For Privacy-Aware Generation on Cloud”, *NAACL 2024, Findings*
5. Yiyang Zhou*, Zhaoyang Wang*, **Tianle Wang***, Shangyu Xing, Peng Xia, Bo Li, Kaiyuan Zheng, Zijian Zhang, Zhaorun Chen, Wenhao Zheng, Xuchao Zhang, Chetan Bansal, Weitong Zhang, Ying Wei, Mohit Bansal, Huaxiu Yao , “AnyPrefer: An Automatic Framework for Preference Data Synthesis”, *ICLR 2025*

RESEARCH EXPERIENCE

University of North Carolina at Chapel Hill

Chapel Hill, NC, USA

Research Intern, advised by **Prof. Huaxiu Yao**

Jun. 2024 – Dec. 2024

- Self-evolving framework for preference data generation
 - Introduced a novel framework Anyprefer, which synthesizes high-quality preference data for foundation models, improving alignment with human values across diverse modalities
 - Developed a cooperative Markov Game-based feedback mechanism to refine preference data generation, enhancing the accuracy of rewards sampled by the target model.
 - Accepted by *ICLR 2025* as co-first author

SLS Lab, Massachusetts Institute of Technology

Cambridge, MA, USA

Research Intern, advised by **Prof. James Glass** and **Dr. Tianxing He**

Jul. 2022 – Jan. 2023

- Blindspots in PLM-based NLG Metrics
 - Revealed the lack of robustness in PLM-based NLG metrics (e.g., BERTScore) and created an evaluation system with synthetic data for comprehensive checks
 - Identified biases and flaws in various metrics, proposing solutions to mitigate undesirable behaviors
 - Accepted by *ACL 2023*

SDLab, University of California, San Diego

La Jolla, CA, USA

Research Intern, advised by **Prof. Jingbo Shang**

Aug. 2021 – Dec. 2024

- Weakly Supervised Open-world Text Classification
 - Pioneered weakly supervised open-world text classification, revealing limitations of existing methods
 - Proposed WOT-Class, which jointly improves class identification and document classification, achieving a 23.33% macro-F1 improvement across datasets
 - Accepted by *CIKM 2023* as first author
- Benchmark for Extremely Weakly Supervised Text Classification
 - Developed a benchmark to compare extremely weakly supervised text classification methods, particularly between representation learning and prompt-based approaches
 - Analyzed factors influencing performance, such as dataset type, prompt design, class names, and PLM
 - Accepted by *ACL 2023* as co-first author

SELECTED HONORS AND AWARDS

Irving T. Ho Memorial Scholarship

One of the 4 winners in SJTU 2022

Zhiyuan Honorary Scholarship

Top 5% in SJTU 2019 - 2022

Silver Medal

Top 150 in The 34th China's National Olympiad in Informatics (NOI) 2017

TEACHING EXPERIENCE

Reader

Fall 2024

Advanced Data-Driven Text Mining (CSE 291 & DSC 253), *UCSD*

Teaching Assistant

Spring 2021

Data Structures (CS 152), *SJTU*

Teaching Assistant

Fall 2020

Great Ideas in Computer Science (CS 163), *SJTU*

SELECTED PROJECTS

🔗 x-TC

Fall 2022

Benchmark, Text Classification

- An implementation of our *ACL* paper
- Built a benchmark for comparing different extremely weakly supervised text classification methods
- User-friendly to edit the framework and incorporate novel methods and datasets

🔗 WOT-Class

Spring 2022

Text Classification, Open-world Learning

- An implementation of our *CIKM* paper
- Designed an iterative refinement framework that achieved state-of-the-art performance in weakly supervised open-world text classification settings