Yinkai Wang

Doctorate Candidate Computer Science Tufts University Boston, MA → +1-8573661858 yinkai.wang@tufts.edu

G GitHub

in LinkedIn

☎ Google Scholar

♣ Website

EXPERIENCE

• JD.com

Research Intern

Beijing, China

- Worked on text generation with a primary focus on creating text outputs that seamlessly blend with human-written content. This involved utilizing advanced algorithms and iterative training processes to refine the generated text, ensuring it met the desired quality standards.
- Engaged with the Unilm and LDA models to extract topics from customer reviews. This extracted information was then utilized to craft personalized written content for each customer, enhancing the user experience and ensuring content relevancy.

· VDIG lab, Peking University

Nov 2021 - Aug 2022

Researcher

Beijing

- Delved deep into object detection, a pivotal computer vision technique aimed at pinpointing instances of objects within images or videos. This research not only involved the application of established methodologies but also led to innovative outcomes, such as the introduction of the "objection" concept within object detection algorithms. This concept enhanced the interpretability of detection results.
- Leveraged the power of self-supervised learning (SSL) combined with transformer architectures to enhance object detection in images. This approach capitalized on unlabeled data, harnessing its potential to train models more effectively. The integration of transformer structures further improved the spatial understanding of the model, leading to more accurate and granular object detections.

• ByteDance

Apr 2021 - July 2021

Intern in DevEco

Beijing

- Concentrated on the foundational layer of Bytedance's host Android app, a critical component with intricate coupling relationships to a majority of Bytedance's applications. This involved understanding the app's architecture, and ensuring seamless integration and communication between the host app and other dependent apps.
- Pioneered the creation of a mock setting environment, a simulated platform tailored to facilitate QA testing. This innovative approach streamlined the testing process, reducing potential bottlenecks and significantly accelerating the publishing timeline, leading to more efficient release cycles.
- Championed the enhancement of the development environment, specifically catering to developers working on microapps within Bytedance. This initiative involved optimizing tools, workflows, and collaboration platforms, ensuring a productive and comfortable workspace that fostered creativity and efficiency.

SELECTED PUBLICATIONS

Large Language Model is Secretly a Protein Sequence Optimizer

[PDF]

Accepted by LMRL ICLR 2025

Yinkai Wang, Jiaxing He, Yuanqi Du, Xiaohui Chen, Jianan Canal Li, Li-Ping Liu, Xiaolin Xu, Soha Hassoun.

MADGEN: Mass-Spec attends to De Novo Molecular generation

[PDF]

Accepted by ICLR 2025

Yinkai Wang, Xiaohui Chen, Liping Liu, Soha Hassoun

Graph Generative Pre-trained Transformer

[PDF]

Accepted by ICLR 2025 workshop (In submission to ICML)

Xiaohui Chen, Yinkai Wang, Jiaxing He, Yuanqi Du, Xiaolin Xu, Soha Hassoun, Liping Liu.

On Separate Normalization in Self-supervised Transformers

[PDF]

Accepted by NeurIPS 2023

Xiaohui Chen, Yinkai Wang, Yuangi Du, Soha Hassoun, Liping Liu

A Survey on Deep Graph Generation: Methods and Applications

[PDF]

Accepted by LoG 2022

Yinkai Wang*, Yanqiao Zhu*, Yuanqi Du*, Jieyu Zhang, Qiang Liu, Shu Wu

Small Molecule Generation via Disentangled Representation Learning

[PDF]

Accepted by Bioinformatics 2022

Yuangi Du, Xiaojie Guo, Yinkai Wang, Amarda Shehu, Liang Zhao

Multi-objective Deep Data Generation with Correlated Property Control	[PDF]
Accepted by NeurIPS 2022	[FDF]
Shiyu Wang, Xiaojie Guo, Xuanyang Lin, Bo Pan, Yuanqi Du, Yinkai Wang . (and 8 others)	
Deep Latent-Variable Models for Controllable Molecule Generation	[PDF]
Accepted by BIBM 2021 Yuanqi Du, Yinkai Wang , Fardina Alam, Yuanjie Lu, Xiaojie Guo, Liang Zhao, Amarda Shehu	
Dataset Geography: Mapping Language Data to Language Users Accepted by ACL 2022	[PDF]
Fahim Faisal, Yinkai Wang, Antonis Anastasopoulos	
EDUCATION	
• Ph.D in Computer Science	$2022 ext{-}Present$
Tufts University, United States	
• Master in Computer Science	2022-2024
Tufts University, United States	
Bachloar in Computer Science	2018-2021
George Mason University, United States	
• Bachloar in Computer Science Huaqiao University, United States	2017-2022
Huaqiao University, United States	
SELECTED ACADEMIC SERVICES	
• ICML reviewer	2024-present
• ICLR reviewer	2024-present
• NeurIPS reviewer	2023-present
• NeurIPS Datasets and Benchmarks reviewer	$2022 ext{-}present$
• AAAI reviewer	$2022 ext{-}present$