An Yan

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🎓 Education

University of California, San Diego	La Jolla, CA
Ph.D. in Computer Science	2020 – 2024
M.S. in Computer Science	2018 – 2020
Advisor: Julian McAuley	
University of Science and Technology of China	Hefei, China
B.E. in Electronic Engineering and Information Science	2014 – 2018
Overall GPA: 3.83/4.3 (90/100) Rank: Top 5%	

📖 Publications

Preprints & Under submission:

Driving through the Concept Gridlock: Unraveling Explainability Bottlenecks in Automated Driving

- Jessica Echterhoff, **An Yan**, Kyungtae Han, Amr Abdelraouf, Rohit Gupta, Julian McAuley

Mitigating Spurious Correlations for Medical Image Classification via Natural Language Concepts

- **An Yan**, Yu Wang, Petros Karypis, Zexue He, Amilcare Gentili, Chun-Nan Hsu, Julian McAuley

CLIP also Understands Text: Prompting CLIP for Phrase Understanding

- **An Yan**, Jiacheng Li, Wanrong Zhu, Yujie Lu, William Yang Wang, Julian McAuley

Refereed Publications:

M4: A Multi-Level, Multi-Task, and Multi-Domain Medical Benchmark for Language Model Evaluation

- Zexue He, Yu Wang, **An Yan**, Yao Liu, Eric Y Chang, Amilcare Gentili, Julian McAuley, Chun-Nan Hsu
- Empirical Methods in Natural Language Processing (**EMNLP-2023**)

Learning Concise and Descriptive Attributes for Visual Recognition

- **An Yan**, Yu Wang, Yiwu Zhong, Chengyu Dong, Zexue He, Yujie Lu, William Wang, Jingbo Shang, Julian McAuley
- International Conference on Computer Vision 2023 (**ICCV-2023**)

Personalized Showcases: Generating Multi-Modal Explanations for Recommendations

- **An Yan**, Zhankui He, Jiacheng Li, Tianyang Zhang, Julian Mcauley
- The International ACM SIGIR Conference on Research and Development in Information Retrieval (**SIGIR-2023**)

Visualize Before You Write: Imagination-Guided Open-Ended Text Generation

- Wanrong Zhu, **An Yan**, Yujie Lu, Wenda Xu, Xin Eric Wang, Miguel Eckstein, William Yang Wang
- European Chapter of the Association for Computational Linguistics (**EACL-2023**)

ImaginE: An Imagination-Based Automatic Evaluation Metric for Natural Language Generation

- Wanrong Zhu, Xin Wang, **An Yan**, Miguel Eckstein, William Wang
- European Chapter of the Association for Computational Linguistics (**EACL-2023**)

Disambiguating Medical Reports via Contrastive Knowledge Infusion

- Zexue He, **An Yan**, Amilcare Gentili, Julian McAuley, Chun-Nan Hsu
- AAAI Conference on Artificial Intelligence (**AAAI-2023**)

RadBERT: Adapting Language Models to Radiology

- **An Yan**, Chun-Nan Hsu, Amilcare Gentili, Julian McAuley
- Journal of Radiology: Artificial Intelligence, 2022

Personalized Complementary Product Recommendation

- **An Yan**, Yan Gao, Chaosheng Dong, Jinmiao Fu, Tong Zhao, Yi Sun, Julian McAuley
- The ACM Web Conference (**WWW-2022**)

Weakly Supervised Contrastive Learning for Chest X-Ray Report Generation

- **An Yan**, Zexue He, Xing Lu, Jiang Du, Eric Chang, Amilcare Gentili, Julian McAuley, Chun-Nan Hsu
- Empirical Methods in Natural Language Processing (**EMNLP-2021**), Findings

Describing Visual Differences Needs Semantic Understanding of Individuals

- **An Yan**, Xin Wang, Tsu-Jui Fu, William Wang
- European Chapter of the Association for Computational Linguistics (**EACL-2021**)

Multimodal Style Transfer Learning for Outdoor Vision-and-Language Navigation

- Wanrong Zhu, Xin Wang, Tsu-Jui Fu, **An Yan**, Pradyumna Narayana, Kazoo Sone, Sugato Basu, William Wang
- European Chapter of the Association for Computational Linguistics (**EACL-2021**)

2D Convolutional Neural Networks for Sequential Recommendation

- **An Yan**, Shuo Cheng, Wang-Cheng Kang, Mengting Wan, Julian McAuley
- ACM International Conference on Information and Knowledge Management (**CIKM-2019**)

PA3D: Pose-Action 3D Machine for Video Recognition

- **An Yan**, Yali Wang, Zhifeng Li, Yu Qiao
- IEEE Conference on Computer Vision and Pattern Recognition (**CVPR-2019**)

&+ INDUSTRY EXPERIENCE

Research Intern at Microsoft, Redmond, WA   Sep. 2023 – Present

Hosts: Zhengyuan Yang, Kevin Lin, Linjie Li, Zicheng Liu, Lijuan Wang

- Training, evaluating and understanding Large Vision-Language Models

Research Intern at Adobe, San Jose, CA   June. 2023 – Sep. 2023

Hosts: Raghav Addanki, David Arbour, Zhao Song, Tong Yu

- Energy-based models for controllable text generation
- Prototyped a controllable language model for optimizing digital marketing experiences

Research Intern at Meta, Menlo Park, CA   June. 2022 – Sep. 2022

Hosts: Cem Akkaya, Licheng Yu, Charlie Zhu, Yang Bai

- Multi-modal pre-training for ads understanding and generation.
- Prototyped an extract-and-generate framework to generate template ads for advertisers.

Applied Scientist Intern at Amazon, Seattle, WA   June. 2021 – Sep. 2021

Hosts: Chaosheng Dong, Yan Gao, Jinmiao Fu, Tong Zhao

- Personalized complementary recommendation.
- Built a transformer and GNN framework for personalized complementary product recommendation.

Applied Scientist Intern at Amazon Alexa, Santa Barbara, CA   June. 2020 – Sep. 2020

Hosts: Craig Bennett, Nic Jedema

- Question-Answering quality evaluation.
- Collected internal dataset via Spark. Finetuned BERT models for evaluating QA quality at Alexa.

⧗ ACADEMIC EXPERIENCE

Research Assistant at UC San Diego, La Jolla, CA   2018 – Present

Advisor: Prof. Julian McAuley

- Vision and Language.
- Personalization and Recommendation. (w/ Toyota, Google Deepmind)
- Machine Learning for Healthcare.

Visiting Student at UC Santa Barbara, Goleta, CA   June. 2019 – June. 2020

    Advisor: Prof. William Wang

- Vision-Language Navigation, Cross-lingual Learning. (w/ ByteDance AI Lab, Google Research)
- Image Captioning, Visual Machine Translation.

Visiting Student at Chinese Academy of Sciences, Shenzhen, China   Mar. 2018 – Aug. 2018

    Advisor: Prof. Yu Qiao

- Video Recognition, Human Pose Estimation. (w/ Tencent AI Lab)

Research Assistant at USTC, Hefei, China   Sep. 2016 – Jan. 2018

    Advisors: Prof. Cong Shen, Prof. Weiping Li

- Reinforcement Learning, Multi-Armed Bandit Problem.

✈ PROFESSIONAL SERVICES

- Reviewer & PC member: NeurIPS, ICLR, ACL, CIKM, EMNLP, AAAI, RecSys, WWW, WSDM, MLHC, EACL, ACL Rolling Review
- Senior PC member: AAAI-2023, AAAI-2024
- Session Chair: WWW-2022