ZHAN XUEYING

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Education

B.S. ***Sun Yat-sen University*** *Overall GPA*: 3.95/5.0, *Ranking*: 21/434 Aug. 2013 - Jun. 2017

School of Data and Computer Science, Department of Mobile Information Engineering.

Ph.D. ***City University of Hong Kong*** *Overall GPA*: 3.75/4.3 Sep. 2017 - Jun. 2023

College of Science and Engineering, Department of Computer Science.

Experiences

- Lab member, ***Sun Yat-sen University***, School of Data and Computer Science. Jan. 2015 - Jun. 2017
  Supervisor: Dr. Yanghui Rao.
- P.h.D., ***City University of Hong Kong***, Department of Computer Science. Sep. 2017 - Jun. 2023
  Supervisor: Prof. Antoni Bert Chan and Prof. Qing Li.
- Visiting Scholar, ***Tsinghua University***, Department of Computer Science and Technology. Sep. 2020 - Jun. 2021
  Supervisor: Prof. Jie Tang.
- Research Intern, ***Baidu Research, Baidu Inc.***, Big Data Lab. Jul. 2021 - Mar. 2023
  Mentor: Dr. Qingzhong Wang & Dr. Haoyi Xiong.
- Postdoc, ***Carnegie Mellon University***, Computational Biology Department. Jul. 2023 - Present
  Supervisor: Dr. Min Xu.

Research Interests

Bio-image Analysis; Active Learning; Machine Learning; Crowd-sourcing; Sentiment Analysis.

Publications

- Yaowei Wang, Yanghui Rao, **Xueying Zhan**, et al. Sentiment and emotion classification over noisy labels[J]. Knowledge-Based Systems, 2016, 111: 207-216. [SOURCE]
- **Xueying Zhan**, Yaowei Wang, Yanghui Rao, Qing Li, et al. A network framework for noisy label aggregation in social media[C]. *Proceedings of the 55th Annual Meeting of the Association for Computational Linguistics* (ACL Volume 2). 2017. [SOURCE]
- **Xueying Zhan**, Yaowei Wang, Yanghui Rao, Qing Li. Learning from Multi-annotator Data: A Noise-aware Classification Framework[J]. ACM Transactions on Information Systems (TOIS), 2019, 37(2): 26.[SOURCE]
- **Xueying Zhan**, Huan Liu, Qing Li, Antoni B. Chan. A Comparative Survey: Benchmarking for Pool-based Active Learning[C]. Accepted by IJCAI 2021.[SOURCE]
- **Xueying Zhan**, Qing Li, Antoni B. Chan. Multiple-criteria Based Active Learning with Fixed-size Determinantal Point Processes[C]. ICML@Workshop 2021 (SubSetML).[SOURCE]
- **Xueying Zhan**, Qingzhong Wang, Kuanhao-huang, Haoyi Xiong, Dejing Dou, Antoni B. Chan. A Comparative Survey of Deep Active Learning[C]. Neurips@Workship 2021 (Human-in-the-Loop).[SOURCE]
- **Xueying Zhan**, Yaowei Wang, Antoni B. Chan. Asymptotic Optimality for Active Learning Processes[C]. The 38th Conference on Uncertainty in Artificial Intelligence (UAI). 2022.[SOURCE]
- **Xueying Zhan**, Zeyu Dai, Qingzhong Wang, Haoyi Xiong, Qing Li, Dejing Dou, Antoni B. Chan. Pareto Optimization for Active Learning under Out-of-Distribution Data Scenarios[J]. Transactions on Machine Learning Research [SOURCE]

– **Xueying Zhan**. Active Learning under Complex Data Scenarios. P.h.D. Thesis [SOURCE]

– Xingjian Li, Pengkun Yang, Yangcheng Gu, **Xueying Zhan**, Tianyang Wang, Min Xu, Chengzhong Xu. Deep active learning with noise stability[C]. Proceedings of the AAAI Conference on Artificial Intelligence 2024. [SOURCE]

– Jennifer Jiang, Mikhail V Keniya, Anusha Puri, **Xueying Zhan**, et al. Structural and Biophysical Dynamics of Fungal Plasma Membrane Proteins and Implications for Echinocandin Action in Candida glabrata. Submitted. [SOURCE]

– Chentianye Xu, **Xueying Zhan**(co-first author), Min Xu. CryoMAE: Few-Shot Cryo-EM Particle Picking with Masked Autoencoders. Submitted. (co-first author)[SOURCE]

Research Projects

– Cryo-ET data analysis.

– Label de-noising/aggregation for crowd-sourcing data.

– Multiple-criteria Pool-based Active Learning.

– Pool-based (Deep) Active Learning Survey Project.

– Unbiased Active Learning.

– Active Learning Under Out-of-Distribution Data Scenarios.

Open-sourced Software

– Deep Active Learning Plus (*DeepAL+*), PyTorch. [SOURCE]

– AI platform for Cryo-electron Tomography (*AITom*), Python/C++. (Main Contributor)[SOURCE]

Honors, Awards & Scholarships

– Outstanding Intern. Baidu Research. (Jan. 2022)

– Research Tuition Scholarship, City University of Hong Kong. (Sep. 2019 - Aug. 2020)

– Outstanding Academic Performance Award, City University of Hong Kong. (Aug. 2019)

– Postgraduate Studentship, City University of Hong Kong. (Sep. 2017 - Aug. 2021)

– Excellent Graduate, Sun Yat-sen University. (Jun. 2017)

– The First Prize Scholarship (Sep. 2015), 5% of department. The Second Prize Scholarship (Sep. 2016), 10% of department. The Third Prize Scholarship (Sep. 2014), 30% of department. School of Data and Computer Science, Sun Yat-sen University.

– The Zhuhai Coca-Cola Scholarship for Outstanding Students (5/446 students). School of Data and Computer Science, Sun Yat-sen University.

Teaching Experiences

• Sun Yat-sen University, school of Data and Computer Science, **Teaching Assistant**

– Digital System Design (for BSc) (Sep. 2015 - Jan. 2016)

– Operating System (for BSc) (Feb. 2016 - Jun. 2016)

– Principle of Computer Organization (for BSc) (Feb. 2016 - Jun. 2016)

– Digital Signal Processing (for BSc) (Feb. 2016 - Jun. 2016)

  - Artificial Intelligence (for BSc) (Sep. 2016 - Jan. 2017)

- City University of Hong Kong, department of Computer Science, **Teaching Assistant**
  - CS1102 Introduction to Comp Studies (for BSc) (Sep. 2017 - Dec. 2017 & Jan. 2018 - Jun. 2018)
  - CS4487 Machine Learning (for BSc) (Sep. 2018 - Dec. 2018)
  - CS6487 Topics in Machine Learning (for MSc) (Jan. 2019 - Jun. 2019)
  - CS5487 Machine Learning (for MSc) (Sep. 2019 - Dec. 2019)
  - CS5489 Machine Learning: Algorit&Apns (for MSc) (Jan. 2020 - Jun. 2020)

Service

- Neurips 2021, 2022, 2023, 2024, as reviewer
- Neurips dataset & benchmark track 2021, 2022, 2023, 2024, as reviewer
- ICML 2021, 2022, 2023, 2024, 2025, as reviewer
- ICLR 2021, 2022, 2023, 2024, as reviewer
- AISTATS 2022, 2023, 2024, 2025, as reviewer
- UAI 2023, 2024, as reviewer
- CVPR 2023, 2024, as reviewer
- ICCV 2023, as reviewer
- ECCV 2024, as reviewer
- WSDM 2024, 2025 as PC (Program Committee) member
- IEEE Transactions on Emerging Topics in Computational Intelligence (journal), as reviewer
- Machine Learning, (journal), as reviewer
- Transactions on Machine Learning Research (journal), as reviewer