Xiao Chen | CV

Hong Kong Polytechnic University, HongKong, China

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Research Interests

Fairness and De-bias in recommender system.

Education

Hong Kong Polytechnic University	**HongKong, CN**

Ph.D. candidate in Computer Science   *2022.01-Now*

Zhejiang University	**Hangzhou, China**

M.Eng. in Computer Science   *2017.09-2020.03*
Research topic: Medical Image Computing
GPA: 3.9/4.0

Northwestern Polytechnical University	**Xi'an, China**

B.Eng. in Software Engineering   *2013.09-2017.06*
GPA: 3.7/4.0

Publications

- **Xiao Chen**, Wenqi Fan, et al. *Fairly Adaptive Negative Sampling for Recommendations*. WWW 2023.
- **Xiao Chen**, Lanfen Lin, et al. *A Cascaded Attention Network for Liver Lesion Classification in Weakly-labeled Multi-phase CT Images*. Medical Image Learning with Less Labels and Imperfect Data (**MIL3ID**) workshop at MICCAI, 2019. **(Oral)**
- **Xiao Chen**, Lanfen Lin, et al. *A Dual attention dilated residual network for liver lesion classification and localization on CT images*. IEEE International Conference on Image Processing (**ICIP**), 2019. **(Oral)**
- Dong Liang, Lanfen Lin, **Xiao Chen**, et al. *Multi-stream scale-insensitive convolutional and recurrent neural networks for liver tumor detection in dynamic CT images*. IEEE International Conference on Image Processing (**ICIP**), 2019. **(Oral)**

Experience

Zhejiang Univesity | Research Assistant	**Hangzhou, CN**

Dept. Computer Science and Technology   *Mar.2020 – Dec.2021*

§ Work on unsupervised multi-modality (infrared and visible) image registration and fusion.

Ritsumeikan University |Research Assistant	**Kyoto, JP**

IIPL Lab, School of Information Science andTechnology   *Nov. 2018–Jan. 2019*

§ Worked closely with Prof. *Chen Yen-wei* on weakly-labeled medical image analysis.
§ Audited computer science course Algorithm Design and Analysis (CS240)

Research Projects

Unsupervised multi-modal image registration *April. 2020–Present*
§ Jointly build an image-to-image translation network with an optical-flow based registration network to solve infrared and visible Bayer raw image registration in an unsupervised way.

Weakly-supervised learning based on multi-phase CT images *Nov.2018–Dec.2019*
Advisor: Prof. Yen-wei Chen & Prof. Lanfen Lin | @Ritsumeikan, ZJU
§ Propose a non-local spatial and channel attention mechanism that could be integrated into CNN network.
§ Propose *one-stage liver lesion classification and localization framework* for weakly-labeled CT images.
§ Outperform conventional attention-based methods and closer to state-of-the-art fully-supervised methods.

Adversarial Semi-supervised Learning for liver segmentation *Nov.2018–April.2019*
Advisor: Prof. Yen-wei Chen & Prof. Lanfen Lin | @Ritsumeikan, ZJU
§ Propose a unified semi-supervised framework for liver segmentation task, which includes: a segmentation network and a discriminant network.
§ Propose an atlas-prior-GAN that utilizes atlas prior information as the guidance for liver segmentation task.
§ Outperform other semi-supervised methods on several benchmarks.

Technical Skills

Programing Language | Python, C++, C, Java, Scala
Software & Platform | Pytorch, Docker, Visio, Linux shell
English | IELTS 7.0 (R:7.5 L:8.0 S:6.0 W:6.0)   GRE 323 + 3.5 TOEFL 96(R29, L22, S21, W24)
Completed Courses | Computer Vision, Convex Optimization, Data Mining, Introduction to Artificial Intelligence, Probability theory, Image processing and modeling, Advanced Mathematics, Software Engineering

Awards

Outstanding Graduate Student in Zhejiang Province	*2020*
Huawei Elite Scholarship | School Award (10 out of 345)	*2019*
Merit Student & Excellent Student Cadre in ZJU| School Award	*2018,2019*
Research Assistant Scholarship | School Award	*2018*
Chiang Chen Scholarship | School Award (10 out of 345)	*2018*
Honored Graduate Student | School Award	*2017*
National Scholarship | National Award (0.6%)	*2016*
Second Prize | China Undergraduate Student Service Outsourcing Innovation and Entrepreneurship Competition | National Award	*2016*
Second Prize | Campus Programming Competition | School Award	*2016*
7th First Prize | Asian Super Computer Competition | Worldwide Award	*2016*
Honorable Mention Award | Interdisciplinary Contest in Modeling | Worldwide Award	*2016*
2nd First Prize | COCA-COLA Campus English Public Speech Contest | School Award	*2015*
Second Class | Oracle Java Programming Contest | National Award	*2015*
Electronic Industry Press Scholarship | School Award (top 0.5%)	*2015*
AEDK Special Scholarship | School Award (10/235)	*2014*
Second Prize | Mathematical Modeling Contest | School Award	*2014,2015*
Level A School Scholarship | Top 10% students in NWPU	*2014,2015,2016*
Merit Student & Excellent Student Cadre | School Awards	*2014,2015,2016*

Leadership & Societies

Vice Minister | Campus Student Union & Mathematical Modeling Club	*2016*
Volunteer | China-Korea Commonweal Project, building a library for "left-over" kids	*2015*