

ZHU Bin

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Education

PhD, City University of Hong Kong, China, 2021

Master of Engineering, Zhejiang University, China, 2018

Bachelor of Engineering, Southeast University, China, 2015

Academic Appointments

Incoming Assistant Professor of Computer Science, School of Computing and Information Systems, SMU, starting from Jan 2024

Research Associate, Department of Computer Science, University of Bristol, Aug 2021 – Nov 2023

RESEARCH

Research Interests

Multimedia Analysis

Egocentric Video Understanding

Generative models

Multi-modal Large Language Model

Food Computing

Publications

Journal Articles [Refereed]

Bin Zhu, Chong-Wah Ngo, Wing-Kwong Chan. Learning from Web Recipe-image Pairs for Food Recognition: Problem, Baselines and Performance. IEEE Transactions on Multi-media (TMM), 2021.

Yanbin Hao, Chong-Wah Ngo, Bin Zhu*. Learning to Match Anchor-Target Video Pairs with Dual Attentional Holographic Networks. IEEE Transactions on Image Processing (TIP), 2021 (* refers to corresponding author).

Jingjing Chen, Bin Zhu, Chong-Wah Ngo, Tat-Seng Chua, Yu-Gang Jiang. A Study of Multi-Task and Region-Wise Deep Learning for Food Ingredient Recognition. IEEE Transactions on Image Processing (TIP), 2020.

Conference Proceedings

Jiarui Yu, Haoran Li, Yanbin Hao, Bin Zhu, Tong Xu, Xiangnan He. CgT-GAN: Image Captioning with CLIP-guided Text GAN. ACM International Conference on Multimedia (MM), 2023.

Ahmad Darkhalil*, Dandan Shan*, Bin Zhu*, Jian Ma*, Amlan Kar, Richard Ely Locke Higgins, Sanja Fidler, David Fouhey, Dima Damen. EPIC-KITCHENS VISOR Benchmark: Video Segmentations and Object Relations. In Thirty-sixth Conference on Neural Information Processing Systems Datasets and Benchmarks Track (NeurIPS), 2022 (* refers to equal contribution).

Yuehao Yin, Bin Zhu, Jing-jing Chen, Lechao Cheng, Yugang Jiang. Mix-DANN and Dynamic-Modal-Distillation for Video Domain Adaptation. In ACM International Conference on Multimedia (MM), 2022.

Yanbin Hao, Jingru Duan, Hao Zhang, Bin Zhu, Pengyuan Zhou, Xiangnan He. Un-supervised Video Hashing with Multi-granularity Contextualization and Multi-structure Preservation. In ACM International Conference on Multimedia (MM), 2022.

Bin Zhu, Chong-Wah Ngo, Jingjing Chen and Wing-Kwong Chan. Cross-lingual Adaptation for Recipe Retrieval with Mixup. In ACM International Conference on Multimedia Retrieval (ICMR), 2022.

Bin Zhu, Chong-Wah Ngo. CookGAN: Causality based Text-to-Image Synthesis. In IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2020.

Bin Zhu, Chong-Wah Ngo, Jing-jing Chen. Cross-domain Cross-modal Food Transfer. In ACM International Conference on Multimedia (MM), 2020.

Yanbin Hao, Zi-Niu Liu, Hao Zhang, Bin Zhu, Jingjing Chen, Yu-Gang Jiang, Chong-Wah Ngo. Person-level Action Recognition in Complex Events via TSD-TSM Networks. In ACM International Conference on Multimedia (MM) Grand Challenge, 2020.

Bin Zhu, Chong-Wah Ngo, Jingjing Chen, Yanbin Hao. R2GAN: Cross-modal recipe retrieval with generative adversarial network. In IEEE Conference on Computer Vision and Pattern Recognition (CVPR), 2019.

EXTERNAL SERVICE – PROFESSIONAL

Organizer of EPIC-KITCHENS-100 2023/2022 CHALLENGES

Organizer of Special Session on Multimedia on Cooking and Eating Activities, ACM Multimedia Asia 2023

Reviewer of Annual AAAI Conference on Artificial Intelligence 2024 (AAAI)

Reviewer of IEEE/CVF Conference on Computer Vision and Pattern Recognition 2023, 2024 (CVPR)

Reviewer of International Conference on Computer Vision 2023 (ICCV)

Reviewer of ACM International Conference on Multimedia 2023 (MM)

Reviewer of IEEE Transactions on Multimedia (TMM)

Reviewer of IEEE Transactions on Cybernetics

Reviewer of ACM Transactions on Multimedia Computing, Communications, and Applications (TOMM)

Reviewer of IEEE/CVF Winter Conference on Applications of Computer Vision 2023, 2024 (WACV)

Reviewer of Information Sciences

Reviewer of Machine Vision and Applications (MVA)

Reviewer of IET Computer Vision

Teaching Areas

Object Oriented Programming