

# Binzhu Xie

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## EDUCATION BACKGROUND

### Queen Mary University of London

- Bachelor of Engineering **GPA:** 3.7/4; **Ranking:** 18/180.

E-Commerce Engineering with Law  
09/202006/2024

### Beijing University of Posts and Telecommunication

- Bachelor of Engineering **GPA:** 88.8/100; **Ranking:** 18/180.

E-Commerce Engineering with Law  
09/2020-06/2024

**My interests:** Visual Understanding (VLLM), Vision 3D (with XR), LLM Scaling Analysis, Generative AI.

## PUBLICATIONS

- [1]. Yuyang Jiang, **Binzhu Xie**, Lina Xu, Xiaokang Lei, Shi Qiu, Luwen Yu, Pan Hui. Generative Multi-Sensory Meditation: Exploring Immersive Depth and Activation in Virtual Reality. **ACM MM 2025**.
- [2]. Sicheng Zhang \*, **Binzhu Xie** \*, Zhonghao Yan \*, Yuli Zhang, Donghao Zhou, Xiaofei Chen, Shi Qiu, Jiaqi Liu, Guoyang Xie, Zhichao Lu. Trade-offs in Image Generation: How Do Different Dimensions Interact? **ICCV 2025**.
- [3]. Zhenghao Xing \*, Hao Chen \*, **Binzhu Xie**, Jiaqi Xu, Ziyu Guo, Xuemiao Xu, Jianye HAO, Chi-Wing Fu, Xiaowei Hu, Pheng-Ann Heng. EchoTraffic: Enhancing Traffic Anomaly Understanding with Audio-Visual Insights. **CVPR 2025**.
- [4]. **EgoLife Team**. EgoLife: Towards Egocentric Life Assistant. **CVPR 2025**.
- [5]. Shi Qiu, **Binzhu Xie**, Qixuan Liu, Pheng-Ann Heng. Creating Virtual Environments with 3D Gaussian Splatting: A Comparative Study. **IEEE VR** (Poster) 2025.
- [6]. Shi Qiu, **Binzhu Xie**, Qixuan Liu, Pheng-Ann Heng. Advancing Extended Reality with 3D Gaussian Splatting: Innovations and Prospects. **IEEE AIxVR** (Poster) 2025.
- [7]. **Xie, B. \***, Zhang, S. \*, Zhou, Z. \*, Li, B., Zhang, Y., Hessel, J., Yang, J. and Liu, Z., 2023. FunQA: Towards Surprising Video Comprehension. **ECCV 2024**.
- [8]. Du, H. \*, Zhang, S. \*, **Xie, B. \***, Nan, G., Tao, X., Jiang X. 2023, Uncovering What, Why and How: A Comprehensive Benchmark of Anomaly Causation of Video Anomaly. **CVPR 2024**.
- [9]. Du, H., Nan, G., Zhang, S., **Xie, B.**, Fan, H., Cui, Q., Tao, X., Jiang X., 2023, DocMSU: A Comprehensive Benchmark for Document-level Multimodal Sarcasm Understanding. **AAAI 2024**.
- [10]. Chen, J., Wu, M., Yan, H., **Xie, B.**, Zhang, C., 2023. Change-Aware Network for Damaged Roads Recognition and Assessment Based on Multi-temporal Remote Sensing Imageries. **PRCV 2023**.

\* **Equal Contribution**

## WORK EXPERIENCE

### Junior Assistant Research, Chinese University of Hong Kong, CSE Department

20/09/2024-04/08/2025

- Research Direction is computer 3D vision highly related XR and HCI.

### Full Stack Engineering Intern, China Petroleum Planning Institute, Refining Department

05/2023-Present

- Establish a database concerning the international TEMA standard and achieve China's first standard localization: use SQLITE to maintain database files, use Python and C# to develop test programs by connecting db files, and use Python and HTML for front-end and back-end website development.
- Integrated SQL Server database, utilized Python's numpy and pandas for data analysis, and employed matplotlib and pychart for data visualization.
- Analyzed inter-table relationships and variable characteristics according to company needs, and used MySQL to rebuild the database for the backend and computational development engineers.

### Computer Vision Algorithm Intern, Perfect World, Sustainable Development Department

02/2023-05/2023

- Responsible for the scientific research work of the AIGC field: Studied and reproduced classic image generation models and multimodal models, such as GAN, DDPM, DDIM, and CLIP.
- Explored Stable Diffusion and DALLE-2 models. By reproducing controlNet, it provides companies with a variety of IP image virtual persons and publishes them on its own Xiaohongshu platform.
- Created a guide for AIGC mid-journey usage and scientific research support for the cultural and creative competition east of the Forbidden City in Dongcheng District, Beijing.

## HONORS & AWARDS

### Xiaomi Corporate Scholarship

10/2022

### BUPT First-Class Scholarship

10/2021

### Silver Award, 14<sup>th</sup> & 16<sup>th</sup> BUPT Programming Contest

11/2020 & 11/2022