QIXIANG (Elliot), ZHANG

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EDUCATION

The Hong Kong University of Science and Technology (HKUST)   **09/2023 – Present**
Doctor of Philosophy (Ph.D.) in Electronic and Computer Engineering
- Supervisor: Prof. Xiaomeng LI
- Research Interest: Computer Vision, Medical Image Analysis, Computational Pathology

Sichuan University (SCU)   **09/2019 – 07/2023**
Bachelor (B.Eng.) in Software Engineering
- GPA (Rank): 3.92 / 4.0 (**Top 10%**)

National University of Singapore (NUS)   **07/2021 – 09/2021**
SoC Research Summer Workshop
- Won the First Prize (**Top < 2%**) of SoC Research Summer Workshop

Hong Kong Polytechnical University (PolyU)   **07/2012 – 09/2022**
Ph.D. Research Summer Workshop
- Won the preliminary Ph.D. Offer with 10,000 HKD scholarship

PROFESSIONAL SKILLS

- Language Proficiency: IELTS 7.5, Madeiran (Native Speaker)
- Coding Proficiency: Python (PyTorch, TensorFlow) for Deep Learning, Java (SpringMVC) for Web Development
- Tools: MS Word, LaTeX for copywriting; Multiple IDEs (PyCharm, IDEA)

RESEARCH EXPERIENCE

Research Assistant | Dept. Computing, SCU   **09/2020 - 12/2022**
- Involved in multiple research projects under the guidance of Prof. Yan WANG.

Research Intern | Dept. ECE, HKUST   **12/2022 - 19/2023**
- Involved in multiple research projects under the guidance of Prof. Xiaomeng LI.

PUBLICATIONS

*indicates the author with equal contributions

"Exchanging Semantic and Domain Knowledge for Generic Semi-Supervised Medical Image Segmentation"
- Journal: IEEE Transactions on Medical Imaging
- Author list: **Zhang Q,** Wang H, Zhang Q, Li X
- [Paper Link] | [GitHub Link]

"Morphology-inspired unsupervised gland segmentation via selective semantic grouping"
- Conference: 2023 International Conference on Medical Image Computing and Computer-Assisted Intervention
- Author list: **Zhang Q,** Li Y, Xue C, Li X
- [Paper Link] | [GitHub Link]

"GlandSAM: Injecting Morphology Knowledge into Segment Anything Model for Label-free Gland Segmentation"
- Journal: IEEE Transactions on Medical Imaging (**TMI**)
- Author list: **Zhang Q,** Li Y, Xue C, Li X
- [Paper Link] | [GitHub Link]

"AllSpark: Reborn labeled features from unlabeled in transformer for semi-supervised semantic segmentation"

- Conference: 2024 IEEE/CVF Conference on Computer Vision and Pattern Recognition (CVPR)
- Author list: Wang H*, **Zhang Q*,** Li Y, Xue C, Li X
- [Paper Link] | [GitHub Link]

"Few-Shot Lymph Node Metastasis Classification Meets High Performance on Whole Slide Images via the Informative Non-parametric Classifier"
- Conference: 2024 International Conference on Medical Image Computing and Computer-Assisted Intervention
- Author list: Li Y, **Zhang Q,** Xiang T, Lin Y, Zhang Q, Li X
- [Paper Link] | [GitHub Link]

"Dual Teacher Sample Consistency Framework for Semi-Supervised Medical Image Classification"
- Journal: IEEE Transactions on Emerging Topics in Computational Intelligence
- Author list: **Zhang Q,** Yang Y, Chen Z, Zhang J, Wu X, Zhou J, Wang Y
- [Paper Link] | [GitHub Link]

"Emulating the Human Visual Cortex Improves Fidelity and Interpretability in fMRI-to-Video Reconstruction"
- Conference: 2025 International Conference in Computer Vision (Under Review)
- Author list: Wang H***, Zhang Q***, Wang L, Huang X, Li X
- [Paper Link] | [GitHub Link]

"Reinforced Correlation Between Vision and Language for Precise Medical AI Assistant"
- Journal: Nature Communication (Under Review)
- Author list: Wang H**,** Mao J, Wang L, **Zhang Q**, Elbatel M, Qin Y, Hu H, Li B, Li H, Liang J, Shen J, Li X
- [Paper Link] | [GitHub Link]

"UniEval: Unified Holistic Evaluation for Unified Multimodal Understanding and Generation"
- Conference: 2025 Annual Conference on Neural Information Processing Systems (Under Review)
- Author list: LI Y, Wang H, Zhang Q, Xiao B, Hu C, Wang H, Li X
- [Paper Link] | [GitHub Link]

SCHOLARSHIPS & AWARDS

Redbird Scholarship (Top 1%, 82,000 HKD) | Dept. ECE, HKUST	**09/2023**
Postgraduate Studentship (18,000 HKD per month) | Dept. ECE, HKUST	**09/2023**
Comprehensive First-class Scholarship (Top 5%) | Dept. Software, SCU	**12/2022**
Outstanding Graduate (Top 5%) | Dept. Software, SCU	**06/2023**
Outstanding Student (Top 10%) | Dept. Software, SCU	**09/2022**

TEACHING EXPERTISE

Teaching Assistant | Dept. ECE, HKUST   **02/2025 - Present**
- Artificial Intelligence for Medical Image Analysis (ELEC4840)

Teaching Assistant | Dept. ECE, HKUST   **09/2024 - 01/2025**
- Advanced Topics in Artificial Intelligence for Medical Image Analysis (ELEC5690)

Teaching Assistant | Dept. ECE, HKUST   **02/2024 - 06/2024**
- Introduction to Computer Organization and Design (ELEC2350)