

Zhipeng Deng, Ph.D.

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in Zhipeng Deng

🌐 <http://zhipengdeng.com/>

Employment History

- May 2025 – Now **Postdoc researcher**, Westlake University
Advisor: Prof. Yefeng Zheng (IEEE&AIMBE Fellow)
- Sep 2024 – Jan 2025 **Research Assistant**, Westlake University
- Mar 2022 – Sep 2024 **Research Assistant**, Institute of Science Tokyo
- Sep 2020 – Jul 2021 **C++ Backend Engineer**, Tencent, FinTech, Backend Team.
- Jul 2020 – Sep 2020 **C++ Rendering Engineer**, Bytedance, TikTok, Rendering Engine Team
- Jul 2018 – Oct 2018 **C# Software Engineer**, Huawei Wuhan Research Institute, Hisilicon

Education

- Sep 2021 – Mar 2025 **Ph.D., Institute of Science Tokyo**
Advisor: Prof. Tsuyoshi Isshiki
- Sep 2019 – Nov 2020 **M.Sc. Information Technology, Hong Kong University of Science and Technology**
GPA: 3.86 (First Class Honored Degree)
- Sep 2015 – June 2019 **B.Sc. Computer Science, Wuhan University of Technology**
Major GPA: 88.5 (Ranking: 2/35).

Research Publications

* indicates equal contributions; ✉ indicates corresponding authors.

Journal Articles

- 1 **Z. Deng**, Z. Xu, T. Isshiki, and Y. Zheng, “FedSemiDG: Domain generalized federated semi-supervised medical image segmentation,” *Medical Image Analysis*, vol. 112, p. 104 096, 2026, **MedIA 2026, CAS Q1, JCR Q1, IF=11.8**. [DOI: 10.1016/j.media.2026.104096](https://doi.org/10.1016/j.media.2026.104096).
- 2 **Z. Deng**, Y. Yang, and K. Suzuki, “Federated active learning framework for efficient annotation strategy in skin-lesion classification,” *Journal of Investigative Dermatology*, vol. 12, 2024, **CAS Q2, JCR Q1, IF=5.7**.

Conference Proceedings

- 1 **Z. Deng**, J. Zhou, W. Jiang, H. Wang, X. Lin, Y. Ou, and Y. Zheng, “VISTA: Variance-gated inter-sequence test-time adaptation for multi-sequence MRI segmentation,” in *International Conference on Medical Image Computing and Computer-Assisted Intervention*, **MICCAI 2026 Early accept (~9%), CCF-B**, 2026.
- 2 L. Fan, Y. Ou, **Z. Deng**, P. Dai, C. Hou, J. Yan, Y. Li, K. Long, X. Gong, M. Ikebe, and Y. Zheng, “Step-CoT: Stepwise visual chain-of-thought for medical visual question answering,” in *Findings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition*, **CVPR 2026 Findings**, 2026.
- 3 Xinyao Liu, **Zhipeng Deng** ✉, Wenhan Jiang, Haolin Wang, Xun Lin, Yafei Ou, and Yefeng Zheng ✉, “VoxShield: Protecting 3D medical datasets from unauthorized training via frequency-aware inter-slice disruption,” in *International Conference on Medical Image Computing and Computer-Assisted Intervention*, **MICCAI 2026 Early accept (~9%), CCF-B**, 2026.

- 4 **Z. Deng**, L. Luo, and H. Chen, "Enable the right to be forgotten with federated client unlearning in medical imaging," in *International Conference on Medical Image Computing and Computer-Assisted Intervention*, **MICCAI 2024 Early accept (11%), CCF-B**, Springer, 2024.
- 5 **Z. Deng**, Z. Jin, and K. Suzuki, "Radiation dose reduction in digital breast tomosynthesis by mtann with multi-scale kernels," in *2023 45th Annual International Conference of the IEEE Engineering in Medicine & Biology Society (EMBC)*, IEEE, 2023, pp. 1–7.
- 6 **Z. Deng**, L. Luo, and H. Chen, "Scale federated learning for label set mismatch in medical image classification," in *International Conference on Medical Image Computing and Computer-Assisted Intervention*, **MICCAI 2023 Early accept (14%), CCF-B**, Springer, 2023, pp. 118–127.
- 7 **Z. Deng**, Y. Yang, K. Suzuki, and Z. Jin, "Fedal: A federated active learning framework for efficient labeling in skin lesion analysis," in *2022 IEEE International Conference on Systems, Man, and Cybernetics (SMC)*, **Oral, CCF-C**, IEEE, 2022, pp. 1554–1559.

Skills

Languages	📖	Mandarin Chinese (Native speaker), English (IELTS:7.0), and Japanese (Elementary Proficiency).
Coding	📖	C++, Python, Java, SQL, XML/XSL, \LaTeX , ...
Databases	📖	MySQL, SQLite.
Misc.	📖	Academic research, \LaTeX typesetting and publishing.

Miscellaneous Experience

Awards and Achievements

- 2019 📖 **Excellent Graduates**, Wuhan University of Technology
- 2016 📖 **Merit Student**, Wuhan University of Technology

Fellowships & Scholarships

- 2022 – 2024 📖 **Research Fellow**. Institute of Innovative Research, Tokyo Tech
- 2021 – 2024 📖 **Tsubame Scholarship**. Tokyo Institute of Technology.
- 2021 – 2022 📖 **JASSO Scholarship**. Tokyo Institute of Technology.