

Zhipeng Deng, Ph.D.

✉ z dengaj@connect.ust.hk




in Zhipeng Deng

🌐 <http://zhipengdeng.com/>

Employment History

- May 2025 – Now  **Postdoc researcher**, Westlake University
Advisor: Prof. Yefeng Zheng (IEEE Fellow, Chief Scientist at Tencent)
- Sep 2024 – Jan 2025  **Research Assistant**, Westlake University
Advisor: Prof. Yefeng Zheng (IEEE Fellow, Chief Scientist at Tencent)
- 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

Journal Articles

- 1 **Z. Deng**, Z. Xu, T. Isshiki, and Y. Zheng, “Fedsemidg: Domain generalized federated semi-supervised medical image segmentation,” *Medical Image Analysis*, **under submission**.
- 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, **JCR-Q1, IF=6.5**.

Conference Proceedings

- 1 **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%)**, Springer, 2024.
- 2 **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.
- 3 **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%)**, Springer, 2023, pp. 118–127.

- 4 **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**, 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. |