

Zhipeng Deng, M.Sc.

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🌐 Zhipeng Deng

🌐 <http://zhipengdeng.com/>

Employment History

- Mar 2022 – Sep 2024 📌 **Research Assistant**, Tokyo Institute of Technology
- 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 – Sep 2025 📌 **PhD Candidate, Medical Image Analysis, Tokyo Institute of Technology**
- Sep 2019 – Nov 2020 📌 **M.Sc. Information Technology, Hong Kong University of Science and Technology**
GPA: 3.86 (First Class Honored Degree)
Thesis title: *Fraud Detection In Customer Transactions.*
- Sep 2015 – June 2019 📌 **B.Sc. Computer Science, Wuhan University of Technology**
Major GPA: 88.5 (Ranking: 2/35).
Thesis title: *Playfield Segmentation in Volleyball Games.*

Research Publications

Journal Articles

- 1 **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).

Skills (continued)

- 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.