

Zedong Peng

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Education

M.S.	Shanghai Jiao Tong University , Computer Science Advised by Prof. Jieru Zhao.	Shanghai, China 2024 – 2027
B.S.	Shanghai Jiao Tong University , Electronic Engineering Outstanding Graduate.	Shanghai, China 2020 – 2024

Experience

Research Intern , <i>National Center of Technology Innovation for EDA</i> Advised by Prof. Qiang Xu and Prof. Jieru Zhao. • LLM post training, data construction on domain specific language.	Nanjing, China July 2024 – present
Machine Learning Intern , <i>Intel Asia-Pacific Research & Development Ltd.</i> Advised by Yuan Zhou • Spark SQL Native Engine (Gluten): optimizing CI pipeline. • LLM framework optimizations: improve Intel devices support for vLLM. • Building LLM applications: Text to SQL.	Shanghai, China Nov 2023 – July 2024
Winter School , <i>Data Science Institute, Imperial College London</i> • Applied vector representations to analyze COVID-19 language modal features.	London, UK Jan 2024 – Feb 2024
Research Intern , <i>Shanghai Jiao Tong University</i> Advised by Prof. Liyao Xiang. • Advanced security-focused machine learning research.	Shanghai, China July 2022 – July 2024

Honors and Awards

- Outstanding Graduate of Shanghai Jiao Tong University, 2024.
- 2nd Prize, 13th National University Mathematics Competition, 2021.
- 1st Prize, SJTU "Yunhan Cup" RobotMaster Intramural Competition, 2021.
- Liu Yongling Foundation Scholarship, 2021.
- Advanced Individual in Social Practice of Shanghai Jiao Tong University, 2021.

Publications

HIPPO: A Hierarchy-Preserving and Noise-Tolerant Pre-HLS Power Modeling Framework for FPGA Zefan Lin, Zedong Peng , Mingzhe Gao, Jieru Zhao, Zhe Lin <i>Proceedings of the 44th IEEE/ACM International Conference on Computer-Aided Design (ICCAD)</i>	2025
ForgeHLS: A Large-Scale, Open-Source Dataset for High-Level Synthesis Zedong Peng , Zeju Li, Mingzhe Gao, Qiang Xu, Chen Zhang, Jieru Zhao arXiv preprint arXiv:2507.03255	2025
DeepCircuitX: A Comprehensive Repository-Level Dataset for RTL Code Understanding, Generation, and PPA Analysis Zeju Li, Changran Xu, Zhengyuan Shi, Zedong Peng , Yi Liu, Yunhao Zhou, Lingfeng Zhou, Chengyu Ma, Jianyuan Zhong, Xi Wang, Jieru Zhao, Zhufei Chu, Xiaoyan Yang, Qiang Xu <i>2025 IEEE International Conference on LLM-Aided Design (ICLAD)</i>	2025
A Verifiable and Privacy-Preserving Federated Learning Training Framework Haohua Duan, Zedong Peng , Liyao Xiang, Yuncong Hu, Bo Li <i>2024 IEEE Transactions on Dependable and Secure Computing (TDSC)</i>	2024

Projects

Robotic Dog Development

Advised by Prof. Weiming Zhao and Xiaomi Technology.

- Implemented algorithms that improved locomotion control and user interaction.

Shanghai, China
Nov 2023 – Nov 2024

VR Game "Strange Zoo"

Original VR adventure puzzle game developed for CS085 VR & AR design practice.

- Built interactive gameplay mechanics in Unity3D with C# and Microsoft VR tooling.

Shanghai, China
Sept 2021 – Jan 2022

Robot Cart Design and Control

SJTU "Yunhan Cup" RobotMaster Intramural Competition champion project.

- Designed and fabricated a competition robot with Arduino-based control and C programming for precise actuation.

Shanghai, China
Sept 2021 – Jan 2022

Skills

Programming: C++, Python, SQL, Verilog, Shell, Docker, MATLAB

Languages: Chinese (Native), English (CET-6 481), German (A1)