

QI LUO

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EDUCATION

The Hong Kong University of Science and Technology (Guangzhou)

Ph.D. in Microelectronics, GPA: N/A

Guangzhou, China

Aug.2025 - Sep.2029 (exp.)

Courses: CUDA Programming, Efficient Computing in Heterogeneous Systems, etc.

Southern University of Science and Technology

M.Eng. in Computer Science and Technology, GPA: 3.5 / 4.0

Shenzhen, China

Sep.2022 - Jun.2025

Courses: Advanced Algorithms, Advanced Artificial Intelligence, Numerical Computing, Reinforcement Learning, etc.

Xidian University

B.Eng. in Computer Science and Technology, GPA: 3.6 / 4.0

Xi'an, China

Sep.2015 - Jun.2019

Courses: Operating Systems, Computer Networks, Advanced Mathematics, Linear Algebra, Data Structures and Algorithms, etc.

RESEARCH PAPERS

- [TSE'2025] **Condor: A Code Discriminator Integrating General Semantics with Code Details.** (CCF-A)
Qingyuan Liang, Zhao Zhang, Chen Liu, Zeyu Sun, Wenjie Zhang, Yizhou Chen, Zixiao Zhao, **Qi Luo**, Wentao Wang, Yanjie Jiang, Yingfei Xiong, Lu Zhang. [Paper]
- [NeurIPS'2025] **Decompile-Bench: Million-Scale Binary-Source Function Pairs for Real-World Binary Decompilation.** (CCF-A)
Hanzhuo Tan, Xiaolong Tian, Hanrui Qi, Jiaming Liu, Zuchen Gao, Siyi Wang, **Qi Luo**, Jing Li, Yuqun Zhang. [Paper] [Code] [Dataset]
- [ACL'2025 Findings] **Grammar-Based Code Representation: Is It a Worthy Pursuit for LLMs?** (CCF-A)
Qingyuan Liang, Zhao Zhang, Zeyu Sun, Zheng Lin, **Qi Luo**, Yueyi Xiao, Yizhou Chen, Yuqun Zhang, Haotian Zhang, Lu Zhang, Bin Chen, Yingfei Xiong. [Paper]
- [TOSEM'2025] **Prompt-based Code Completion via Multi-Retrieval Augmented Generation.** (CCF-A)
Hanzhuo Tan*, **Qi Luo***, Ling Jiang, Zizheng Zhan, Jing Li, Haotian Zhang, Yuqun Zhang [Paper]
- [EMNLP'2024] **LLM4Decompile: Decompiling Binary Code with Large Language Models.** (CCF-B)
Hanzhuo Tan, **Qi Luo**, Jing Li, Yuqun Zhang. [Paper] [Code] [Models]
- [FSE'2023] **Enhancing Coverage-Guided Fuzzing via Phantom Program.** (CCF-A)
Mingyuan Wu, Kunqiu Chen, **Qi Luo**, Jiahong Xiang, Ji Qi, Junjie Chen, Heming Cui, Yuqun Zhang. [Paper]

RESEARCH EXPERIENCE

HKUST(GZ) Secure Architecture Lab, Research Assistant

Supervised by Prof. **Yun Chen**

Guangzhou, China

Jun.2025 - Aug.2025

- Worked on dynamic voltage and frequency scaling (DVFS) for large language model training.

SUSTech ARiSE Lab, Research Assistant

Supervised by Prof. **Yuqun Zhang**

Shenzhen, China

May.2022 - Aug.2022

- Worked on the effectiveness of fuzz testing for both binary applications and deep learning models.

WORK EXPERIENCE

Kwai

LLM Algorithm Engineer Intern

Beijing, China

Jun.2023 - Dec.2024

- Contributed to Kwaipilot, an LLM-powered code assistant plugin with code completion and Q&A capabilities.
- Conducted data collection, cleaning, classification, filtering, and processing of over 100TB domain code data.
- Conducted the evaluation of code LLMs by constructing diverse code completion benchmarks through extracting abstract syntax trees from code and human labeling, supporting over 10 programming languages.

- Conducted Continue Pre-Training and Post-Training on various base models, including StarCoder, DeepSeek, Gemma, Llama, etc., ranging in size from 1B to 70B parameters.
- Explored and designed the Block-FIM to enhance the model’s ability to automatically stop completions.
- Built a Retrieval-Augmented Generation system, boosting the code completion performance of LLMs.
- Conducted training of user behavior analysis models utilizing real auto-completion usage data, focusing on contextual filtering, to enhance the capabilities of LLMs on edge devices.
- Contributed to the data platform’s AI development assistant, including SQL completion, SQL repair, and Text2SQL features, achieving over 2,000 DAU with an apply rate of 30%+.
- Provided intelligent code completion services to Xiaomi.
- During the internship, DAU increased from 60 to 4,000+, and the apply rate grew from 5% to 40%.

Streamax Technology AI Center
Algorithm Engineer

Shenzhen, China
Jul.2019 - Jun.2021

- Contributed to ADAS (Advanced Driver Assistance Systems), including FCW (Forward Collision Warning), LDW (Lane Departure Warning), and PCW (Pedestrian Collision Warning).
- Contributed to FCW. FCW utilizes object detection and regression algorithms to precisely locate vehicle position information in the driving area precisely. FCW can monitor collision risks in real-time during driving, integrated with ranging, modeling systems, and lane perception information. FCW can issue timely warning signals 2.7 seconds before danger occurs, effectively preventing traffic accidents such as rear-end collisions.
- Conducted an automated simulation testing tool based on Qt Creator. This tool can extract frame information from H.264 videos of real-world driving scenarios and use it as input for the algorithm pipeline, enabling the simulation of real-world testing and significantly improving algorithm testing efficiency.

Huawei
Software Development Engineer Intern

Xi'an, China
May.2018 - Aug.2018

- Developed back-end for a build pipeline client to streamline the microservices deployment process.

OPEN-SOURCE CONTRIBUTIONS

- **LLM4Decompile:** Decompiling Binary Code with Large Language Models.
 - Accumulated over 6000 stars on [GitHub](#).
 - Featured on [Hacker News](#).
 - LLM4Decompile models have been downloaded over 100k times on Hugging Face.
 - Implemented at ByteDance as an IDA Pro/Ghidra plugin, serving reverse engineers.

SKILLS

General: Python, C/C++, Java, Shell, SQL, Git, Matlab, LaTeX, etc.

DevOps: ElasticSearch, gRPC, Docker, Kubernetes, Qt Creator, Ghidra, faiss, Spark, vLLM, etc.

MLOps: Pytorch, WanDB, TensorFlow, LangChain, DeepSpeed, Megatron etc.

Languages: Chinese (native), English (CET-6, TOEFL 83)

AI-assisted: Proficient with code agents for coding, debugging, and rapid prototyping.

SELECTED HONORS & AWARDS

- Excellence Award, GBA CS Institutes Joint Poster Competition.
 - SF Technology Scholarship (~1%).
 - Honorable Mention in the American Mathematical Contest in Modeling (MCM).
 - Second Prize in the National College Student Computer Design Competition.
 - Outstanding Student Award.
 - Third Prize in ACM Collegiate Programming Contest, Shaanxi Province.
 - Second Prize in the Provincial College Student Mathematics Competition.
 - First-Class & Third-Class Merit Student Scholarship.
- SUSTech, 2025*
XDU, 2018
XDU, 2018
XDU, 2018
XDU, 2017
XDU, 2017
XDU, 2016
XDU, 2015 - 2017

TEACHING ASSISTANT

- **Object-oriented Analysis and Design:** Teaching Assistant for SUSTech Computer Science. *SUSTech, 2023*

STUDENT ACTIVITIES

President of the IBM Club; President of the Streamax Club.

- Organized enterprise-related activities and guided students in entrepreneurial competitions. *XDU, 2016 - 2018*