

# Ke Luo

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Ph.D. in Computer System Architecture    Huazhong University of Science and Technology (HUST)

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Highly-motivated Ph.D. in Computer Science(Computer Architecture) with good foundations of math and statistics. Proficient in storage channel modeling, analysis, and signal processing and enthusiastic about data storage technologies and deep learning inspired information theory. Skilled in Matlab/Octave, Python, and C/C++ programming. Passionate about computer science, hiking, and photography.

## Education

Till now	Wuhan National Laboratory for Optoelectronics, <b>Huazhong University of Science and Technology</b>
March 2023	Postdoc. in Optical Engineering
December 2022	Wuhan National Laboratory for Optoelectronics, <b>Huazhong University of Science and Technology</b>
September 2016	Ph.D. in Computer Architecture
June 2016	College of Electronics and Information, <b>South-Central Minzu University</b>
September 2012	Beachelor in Electronics and Information Engineering

## Research Projects

- ▶ National Natural Science Foundation of China, General Program, No. 62272178, Study of Write Mechanism of Ultra-high Density Three-Dimensional Heat-Assisted Magnetic Recording, 2023/01 ~ 2026/12, Active, Member
- ▶ National Natural Science Foundation of China, General Program, No. 61672246, Key Technologies of Read Heads Array and The Recording System for Two-Dimensional Magnetic Recording at Ultra-high Density, 2017/01 ~ 2020/12, Finished, Member
- ▶ National Natural Science Foundation of China, General Program, No. 61272068, Key Technologies of Ultra-high Density Shingled Magnetic Recording on Bit Patterned Media, 2013/01 ~ 2016/12, Finished, Member
- ▶ Enterprise Cooperation Project, PRML algorithms and techniques for multi-layer Blu-ray discs, 2024/07 ~ 2025/01, Active, Member
- ▶ Enterprise Cooperation Project, BDXL Standard Based PRML Model Design and Implementation, 2022/08 ~ 2023/06, Finished, Member
- ▶ Enterprise Cooperation Project, HDD Prototype Algorithms and Innovative Magnetic Record Technology, 2022/03 ~ 2023/03, Finished, Member

## Research Achievements

## References

[1] K. Luo, K. Zhang, F. Wu, Y. Liao, H. Gao, W. Li, Y. Jian, Z. Liu, Y. Zhao, J. Chen, P. Lu, and S. Wang, "The compatible partial response maximum likelihood detection schemes for blu-ray discs," in *The 21st International Conference on Electrical Engineering/Electronics, Computer, Telecommunications and Information Technology*, 2024.

[2] Y. Liao, K. Zhang, Y. Jian, S. Wang, J. Chen, P. Lu, and K. Luo, "Decision-Feedback Single-Layer Read Reconstruction and Separation for Three-dimensional Magnetic Recording," in *2024 IEEE International Magnetism Conference (INTERMAG)*, no. AD-03, Rio de Janeiro, Brazil, May 2024, pp. 1–2.

[3] K. Luo, Y. Wu, Y. Liao, S. Wang, Y. Jian, J. Chen, and P. Lu, "Quaternary Neural Network Equalization for

Three-Dimensional Magnetic Recording,” in *2024 IEEE International Magnetism Conference (INTERMAG)*, no. AD-11, Rio de Janeiro, Brazil, May 2024, pp. 1–2.

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