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华中科技大学 计算机系统结构 • 博士 1993-01-02 武汉

计算机系统结构专业博士，擅长磁存储及光存储系统建模与分析，热衷数据存储技术、信号处理与信息理论。

教育背景

至今 2023.03	**华中科技大学** • 武汉光电国家研究中心 光学工程 • 博士后
2022.12 2016.09	**华中科技大学** • 武汉光电国家研究中心 计算机系统结构 • 博士
2016.06 2012.09	**中南民族大学** • 电子信息工程学院 电子信息工程 • 学士

科研项目

- 国家自然科学基金委员会，面上项目，62272178, 超高密度三维热辅助磁记录写机制研究，2023/01 至 2026/12，在研，参与
- 国家自然科学基金委员会，面上项目，61672246，超高密度二维磁记录读磁头阵列及其记录系统关键技术研究，2017/01 至 2020/12，已结题，参与
- 企业横向，基于 BDXL 标准的 PRML 模型设计与实现合作项目，2022/08 至 2023/06，已结题，参与
- 企业横向，HDD 原型算法和先进磁记录技术合作项目，2022/03 至 2023/03，已结题，参与
- 国家自然科学基金面上项目，61272068，比特图案介质的超高密度瓦记录关键技术研究，2013/01-2016/12，已结题，参与

科研成果

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[1] K. Luo, Y. Jian, Y. Liao, K. Zhang, J. Chen, and P. Lu, "A graded precompensation scheme by pattern classification on nonlinear transition shift for perpendicular magnetic recording," **IEEE Transactions on Magnetics**, pp. 1–1, 2023.

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[3] K. Luo, S. Wang, K. S. Chan, W. Chen, J. Chen, P. Lu, and W. Cheng, "A study on block-based neural network equalization in tdmr system with ldpc coding," **IEEE Transactions on Magnetics**, vol. 55, no. 11, pp. 1–5, 2019.

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

Research Achievements

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