Chen Zhao

Personal Information

Family name, First name: Zhao, Chen
Gender: Male
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Education Background

Beijing University of Posts and Telecommunications, Beijing, China Sept 2023 – Present

- Master's student major in Information and Communication Engineering, Subdiscipline: Artificial Intelligence
- Research Direction: Information Theory, Advisor: Prof. Zhuqing Jia

Shanghai University, Shanghai, China Sept 2019 – June 2023

- B.Eng. in Telecommunication Engineering, School of Communications and Information
- GPA: 3.75/4.0, Rank 6/254, Top 2.4%

Publication and Patent

- [**Conference**] **Chen Zhao**, Haobo Jia, Zhuqing Jia, "Robust Dynamic Coded Distributed Storage with Partially Storage Constrained Servers", 2025 IEEE Information Theory Workshop (ITW).
- [**Patent**] Yanli Ren, **Chen Zhao**, Gang He, "A Single Server Non-Interactive Privacy-Preserving Linear Regression Method," CN116720208A[P]. 2023-09-08. (First-author Student, Undergraduate Thesis)

Research Experience

Coding Design for Robust Dynamic Distributed Storage in Heterogeneous Storage Constraints (Master's Thesis) Step 2024 – Aug 2025

- **Research Overview:** Robust dynamic coded distributed storage enables (1) read/write operations tolerating server dropouts, (2) update-increment privacy against collusion by any X servers, and (3) operation completion under storage constraints. The goal is to characterize the fundamental limits and achievable schemes for communication cost in heterogeneous storage constraints.
- **Main Contributions:** (1)Characterized the fundamental limits of robust dynamic storage under partial storage constraints and proposed achievablity schemes that match the converse bound.

  (2) Established fundamental limits of robust dynamic storage under arbitrary storage constraints, proposing a coding scheme based on message-splitting that:

  i.)Achieves total storage optimality, ii.) Maintains communication load within a constant factor of fundamental limits at scale.

Competition Awards and Honors

- **National Second Prize**, The 21st China Post-Graduate Mathematical Contest in Modeling, Top 2.6%
- **Shanghai Division First Prize**, National Undergraduate Electronic Design Contest (2022)
- **Shanghai Outstanding Graduate** (2023)
- Shanghai University Academic Excellence Scholarship, Top 2% (2022)

English Proficiency

IELTS(Academic/June 2022): 6.5 overall (listening 7.0, reading 7.0, writing 6.0, speaking 5.5)