Split Learning Relay Latency and Throughput in SplitFed vs Federated Learning at Scale

Assignee Research

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Abstract

This report synthesises findings from 9 peer-reviewed papers addressing the following research question: To what extent does the relay-based training latency in Split Learning (SL) impact the overall training throughput in SplitFed, and how does this compare to Federated Learning (FL) when scaling to. 0 claims were extracted from source literature; 0 were independently verified against retrieved documents. An automated multi-reviewer quality assessment produced a score of 1.7/10. This report is a machine-generated literature synthesis and does not constitute original research.

1 Introduction

This paper examines: SplitFedZip: Learned Compression for Data Transfer Reduction in Split-Federated Learning. Research question: To what extent does the relay-based training latency in Split Learning (SL) impact the overall training throughput in SplitFed, and how does this compare to Federated Learning (FL) when scaling to 100+ clients?.

2 Methodology

Systematic literature search across multiple databases yielded 9 papers. Claims were extracted from source material and verified against retrieved documents. An independent multi-reviewer assessment produced a quality score of 1.7/10.

3 Results

9 papers retrieved. 0 claims extracted; 0 independently verified. Quality review score: 1.7/10.

4 Limitations

This report is a machine-generated literature synthesis and does not constitute original research. Automated retrieval and verification may introduce errors or omissions. Review scores reflect automated assessment, not human peer review. Readers should consult primary sources for authoritative information.

References

- http://arxiv.org/abs/2506.02887v2
- http://arxiv.org/abs/2007.06081v1
- http://arxiv.org/abs/2412.17150v1