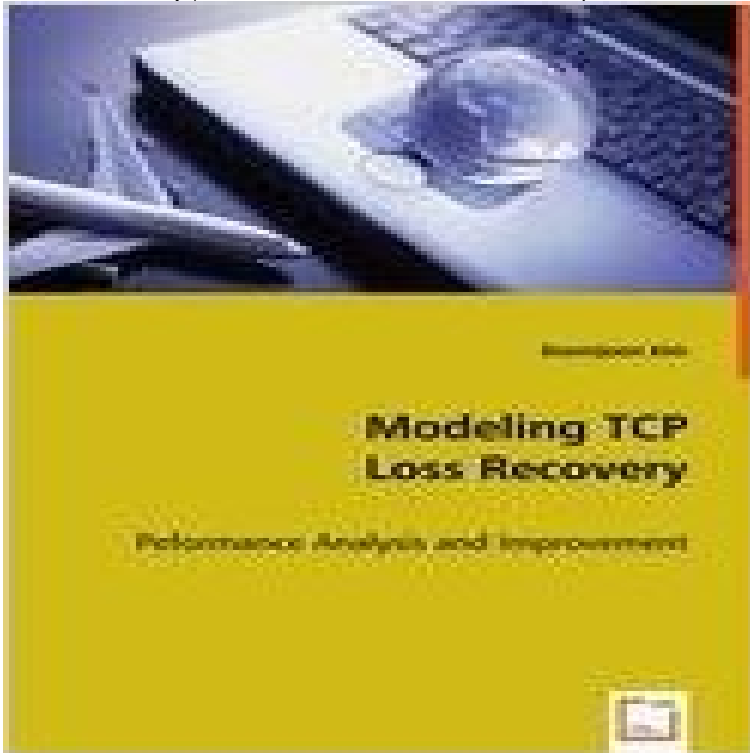


# Modeling TCP Loss Recovery: Performance Analysis and Improvement



Transmission control protocol (TCP), the major transport-layer protocol in the Internet, is designed to perform a process for the recovery of packet losses, because it inevitably causes packets to be lost to assess the capacity of a connection between a transmitter and a receiver. For this reason, the process called loss recovery is a principal factor that affects the performance of TCP. This book, therefore, introduces an approach to analyze the performance of TCP by capturing the detailed behaviors of TCP sender during the loss recovery process. In addition, this book presents a problem that a retransmitted packet loss always causes an unnecessary retransmission timeout (RTO) with a solution called duplicate acknowledgement counting (DAC). This book can be a useful resource for students and professionals in the field of computer networking who seek for further understanding of TCP and its performance.

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