

Internet Teletraffic Modeling and Estimation

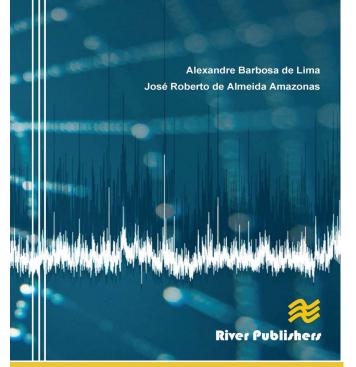
Author: Alexandre Barbosa de Lima and José Roberto de Almeida Amazonas, Escola Politécnica of the University of São Paulo

Network traffic has fractal properties such as impulsiveness, selfsimilarity, and long-range dependence over several time scales, from milliseconds to minutes. These features have motivated the development of new traffic models and traffic control algorithms. This book presents a new statespace model for Internet traffic, which is based on a finite-dimensional representation of the Autoregressive Fractionally Integrated Moving Average (ARFIMA) random process. The modeling via Autoregressive (AR) processes is also investigated.

Content: Introduction, The Fractal Nature of Network Traffic, Modeling of Long- Range Dependent Teletraffic, State-Space Modeling, Modeling of Internet Traffic

River Publishers Series in Information Science and Technology

Internet Teletraffic Modeling and Estimation



River Publishers Series in Computing and Information Science and Technology

ISBN: 9788792982100 **Available From:** February 2013 **Price:** € 90.00

KEYWORDS:

forecast, long memory, long-range dependence, network traffic, prediction, self-similar



www.riverpublishers.com marketing@riverpublishers.com