

Nadarajah, Saralees; Kotz, Samuel

On the convolution of Pareto and gamma distributions. (English) Zbl 1123.68017
[Comput. Netw.](#) 51, No. 12, 3650-3654 (2007).

Summary: It is well established that the burst and idle times for on/off traffic are modeled by the Pareto and gamma distributions, respectively. Thus, the inter arrival times between on-traffic (off-traffic) is the convolution of Pareto and gamma random variables. In this note, we derive exact expressions for the probability density function of the inter arrival times. A computer program and tabulations of the associated percentage points are also provided.

MSC:

[68M10](#) Network design and communication in computer systems

Cited in **3** Documents

Keywords:

[inter arrival time](#); [computer network](#)

Software:

[ARTP](#)

Full Text: [DOI](#)