

عنوان مقاله:

Generating Antithetic Random Variates in Simulation of a Replacement Process by Rejection Method

محل انتشار:

ماهنامه بین المللی مهندسی، دوره 7، شماره 4 (سال: 1373)

تعداد صفحات اصل مقاله: 8

نویسنده:

H. Mahlooji - Industrial Engineering, Sharif University of Technology

خلاصه مقاله:

When the times between renewals in a renewal process are not exponentially distributed, simulation can become a viable method of analysis. The renewal function is estimated through simulation for a renewal process simulation for a renewal process with gamma distributed renewal times and the shape parameter $\alpha > 1$. Gamma random deviates will be generated by means of the so called Acceptance Rejection method. In order to reduce the variance of the point estimator, the idea of antithetic variates will be incorporated in the sampling process. It is shown that such sampling scheme is capable of reducing the variance of the point estimator. Finally, an algorithm is developed and along with the experimental results is verified.

کلمات کلیدی:

Simulation, Variance reduction, Rejection Method

لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1414946>

