



BLS Working Papers: Higher Moments in Perturbation Solution of the Linear-Quadratic Exponential Gaussian Optimal Control Problem

By Baoline Chen

CreateSpace Independent Publishing Platform. Paperback. Book Condition: New. This item is printed on demand. Paperback. 30 pages. Dimensions: 11.0in. x 8.5in. x 0.1in. The paper obtains two principal results. First, using a new definition of higher-order (2) matrix derivatives, the paper derives a recursion for computing any Gaussian multivariate moment. Second, the paper uses this result in a perturbation method to derive equations for computing the 4th-order Taylor-series approximation of the objective function of the linear-quadratic exponential Gaussian (LQEG) optimal control problem. Previously, Karp (1985) formulated the 4th multivariate Gaussian moment in terms of MacRaes definition of a matrix derivative. His approach extends with difficulty to any higher (4) multivariate Gaussian moment. The present recursion straightforwardly computes any multivariate Gaussian moment. Karp used his formulation of the Gaussian 4th moment to compute a 2nd-order approximation of the finite-horizon LQEG objective function. Using the simpler formulation, the present paper applies the perturbation method to derive equations for computing a 4th-order approximation of the infinite-horizon LQEG objective function. By illustrating a convenient definition of matrix derivatives in the numerical solution of the LQEG problem with the perturbation method, the paper contributes to the computational economists toolbox for solving stochastic

Reviews

This is the finest pdf we have go through till now. It usually is not going to expense excessive. I am effortlessly will get a delight of studying a created ebook.

-- **Prof. Evert Lehner**

This is the greatest book we have study right up until now. This can be for all those who statte that there was not a worth reading. Your lifestyle period will probably be enhance when you complete looking at this ebook.

-- **Santos Koelpin**

Other PDFs



[Memoirs of Robert Cary, Earl of Monmouth](#)

BiblioLife. Paperback. Book Condition: New. This item is printed on demand. Paperback. 142 pages. Dimensions: 8.0in. x 5.0in. x 0.3in. The Author of the Memoirs. The Memoirs here presented to the reader may be said to combine every interest which can attach to...



[Aeschylus](#)

BiblioLife. Paperback. Book Condition: New. This item is printed on demand. Paperback. 260 pages. Dimensions: 8.0in. x 5.0in. x 0.6in. This Translation of Aeschylus, an entirely new one, is designed as an Appendix to my edition of that Poet in the Bibliotheca...



[Kindle Fire Tips And Tricks How To Unlock The True Power Inside Your Kindle Fire](#)

CreateSpace Independent Publishing Platform. Paperback. Book Condition: New. This item is printed on demand. Paperback. 52 pages. Dimensions: 9.0in. x 6.0in. x 0.1in. Still finding it getting your way around your Kindle Fire Wish you had the answers to all your frequently asked...



[Just So Stories](#)

CreateSpace Independent Publishing Platform. Paperback. Book Condition: New. This item is printed on demand. Paperback. 114 pages. Dimensions: 9.0in. x 6.0in. x 0.3in. The Just So Stories for Little Children were written by British author Rudyard Kipling. They are highly fantasised origin stories...



[The Mystery in Chocolate Town Hershey, Pennsylvania Carole Marsh Mysteries Teachers Guide](#)

Gallopade International. Paperback. Book Condition: New. Paperback. 32 pages. Dimensions: 11.0in. x 8.2in. x 0.1in. When you purchase the Library Bound mystery you will receive FREE online eBook access! Carole Marsh Mystery Online eBooks are an easy, effective, and immediate way to read...



[Shepherds Hey, Bfms 16: Study Score](#)

Petrucci Library Press. Paperback. Book Condition: New. Paperback. 22 pages. Dimensions: 9.4in. x 7.1in. x 0.0in. Percy Grainger, like his contemporary Bela Bartok, was intensely interested in folk music and became a member of the English Folk-Song Society soon after his arrival in...