Distinguished SCI Seminar

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Block Tensor Computations

April 8th
2:00-3:00 pm
WEB 3760

DSCI

Abstract

Will blocking become as important to tensor computations as it is to matrix computations? I will address this issue in the context of low-rank approximation and tensor contractions. A block tensor connection between the singular values of a general tensor and the eigenvalues of a symmetric tensor will also be discussed.

Bio:

Professor Van Loan received his undergraduate and graduate degrees in mathematics from the University of Michigan (1965-1973). He was a Research Fellow at the University of Manchester (1974-75) and has been a faculty member in the Department of Computer Science at Cornell University since 1975. His research focus is in the field of numerical linear algebra with a current emphasis on tensor computation.

He has written six textbooks: Insight Through Computing--A Matlab Introduction to Computational Science and Engineering (with D. Fan), Matrix Computations, Third Edition (with G.H. Golub), Handbook for Matrix Computations (with T. Coleman), Computational Frameworks for the Fast Fourier Transform, Introduction to Computational Science and Mathematics, and Introduction to Scientific Computation--A Matrix/Vector Approach Using Matlab.

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