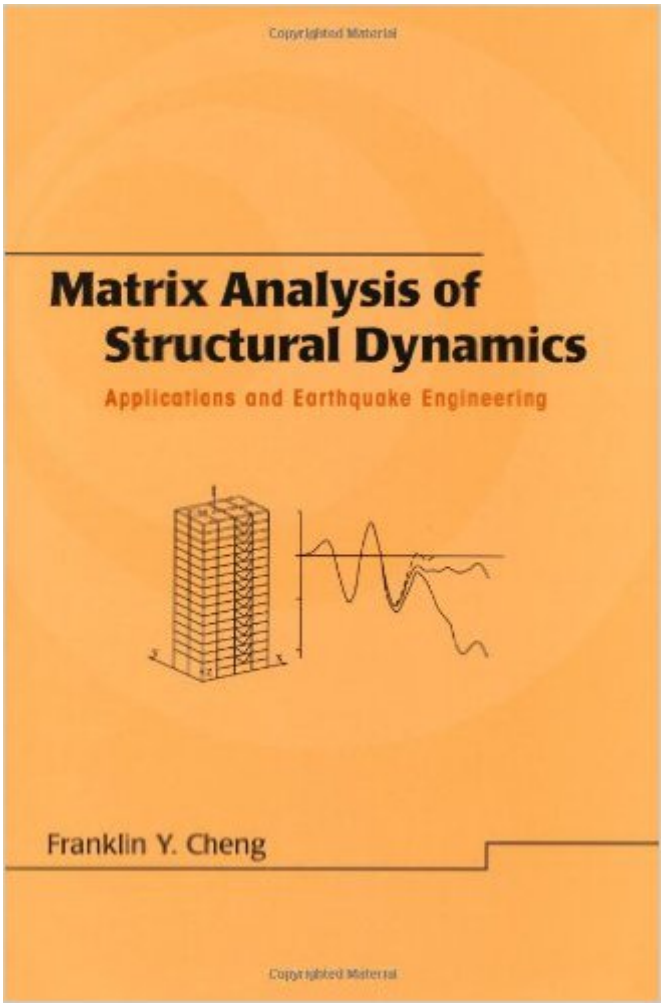
Matrix Analysis Of Structural Dynamics: Applications And Earthquake Engineering (Civil And Environmental Engineering)



Synopsis

Uses state-of-the-art computer technology to formulate displacement method with matrix algebra. Facilitates analysis of structural dynamics and applications to earthquake engineering and UBC and IBC seismic building codes.

Book Information

Series: Civil and Environmental Engineering

Hardcover: 997 pages

Publisher: CRC Press; 1 edition (October 19, 2000)

Language: English

ISBN-10: 0824703871

ISBN-13: 978-0824703875

Product Dimensions: 2 x 7.2 x 10 inches

Shipping Weight: 4.3 pounds (View shipping rates and policies)

Average Customer Review: 4.0 out of 5 starsÂ Â See all reviewsÂ (1 customer review)

Best Sellers Rank: #3,219,333 in Books (See Top 100 in Books) #131 inÂ Books > Engineering & Transportation > Engineering > Civil & Environmental > Structural Dynamics #131 inÂ Books > Engineering & Transportation > Engineering > Civil & Environmental > Seismic Design #205 inÂ Books > Science & Math > Mathematics > Matrices

Customer Reviews

Cheng’s book is well suited for a mechanical or civil engineer who is already well versed in the basics. He then takes you through a comprehensive use of matrices to solve systems of equations that define a physical problem. It starts with the simple cases of free and forced vibrations, combined with whether they are damped or undamped. This segues into the finding of eigensolutions that characterise the system.A very important and practical case of designing structures to handle earthquakes is treated later in the book. Methods developed earlier in the text are suitably applied here.

Matrix Analysis of Structural Dynamics: Applications and Earthquake Engineering (Civil and Environmental Engineering) Wind and Earthquake Resistant Buildings: Structural Analysis and Design (Civil and Environmental Engineering) Earthquake Engineering: Damage Assessment and Structural Design (Methods & Applications in Civil Engineering) Matrix Structural Analysis

(Pws-Kent Civil Engineering Series List) Structural Dynamics by Finite Elements (Prentice-Hall International Series in Civil Engineering and Engineering Mechanics) Dynamics of Structures: Theory and Applications to Earthquake Engineering (2nd Edition) Dynamics of Structures: Theory and Applications to Earthquake Engineering Structural Damping: Applications in Seismic Response Modification (Advances in Earthquake Engineering) Theory of Nonlinear Structural Analysis: The Force Analogy Method for Earthquake Engineering Fundamentals of Earthquake Engineering (Civil engineering and engineering mechanics series) Soil Dynamics with Applications in Vibration and Earthquake Protection A Survey of Matrix Theory and Matrix Inequalities (Dover Books on Mathematics) The Essential Guide to the ACT Matrix: A Step-by-Step Approach to Using the ACT Matrix Model in Clinical Practice Advanced Soil Dynamics And Earthquake Engineering Geotechnical Earthquake Engineering and Soil Dynamics III: Proceedings of a Specialty Conference August 3-6, 1998 University of Washington Seattle, ... Special Publication)Volumes 1 & 2 Fundamentals of Soil Dynamics and Earthquake Engineering Structural Analysis: With Applications to Aerospace Structures (Solid Mechanics and Its Applications) Structural Dynamics: Theory and Applications Structural Stability of Steel: Concepts and Applications for Structural Engineers The Techniques of Modern Structural Geology, Volume 3: Applications of Continuum Mechanics in Structural Geology