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Nota di contenuto	front cover; copyright; table of contents; front matter; PREFACE; body; Chapter 1 Introduction; Chapter 2 Fundamentals of Probability and Random Variables; Chapter 3 Expected Values of Random Variables; Chapter 4 Analysis of Stochastic Processes; Chapter 5 Time Domain Linear Vibration Analysis; Chapter 6 Frequency Domain Analysis; Chapter 7 Frequency, Bandwidth, and Amplitude; Chapter 8 Matrix Analysis of Linear Systems; Chapter 9 Direct Stochastic Analysis of Linear Systems; Chapter 10 Introduction to Nonlinear Stochastic Vibration; Chapter 11 Failure Analysis Chapter 12 Effect of Parameter Uncertaintyback matter; Appendix A Dirac Delta Function; Appendix B Fourier Analysis; References; Author Index; index
Sommario/riassunto	The topic of Introduction to Random Vibrations is the behavior of structural and mechanical systems when they are subjected to unpredictable, or random, vibrations. These vibrations may arise from natural phenomena such as earthquakes or wind, or from human-controlled causes such as the stresses placed on aircraft at takeoff and landing. Study and mastery of this topic enables engineers to design

and maintain structures capable of withstanding random vibrations, thereby protecting human life. Introduction to Random Vibrations will lead readers in a user-friendly fashion to a thorough un
