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Nota di contenuto	Part I - Statically Determinate Structures -- 1.Introduction to Structural Engineering -- 2.Statically Determinate Truss Structures -- 3.Statically Determinate Beams -- 4.Statically Determinate Plane Frames -- 5. Cable Structures -- 6.Statically Determinate Curved Members -- 7. Shallow Foundations -- 8. Vertical Retaining Wall Structures -- Part II- Statically Indeterminate Structures -- 9.The Force Method -- 10.The Displacement Method -- 11.Approximate Methods for Estimating

Forces in Statically Indeterminate Structures -- 12. Finite Element Displacement Method for Framed Structures -- Part III- Practice of Structural Engineering -- 13. Multi-span Horizontal Structures -- 14. Lateral Load Issues for Buildings -- 15. Vertical Loads on Multistory Buildings -- 15. Vertical Loads on Multistory Buildings -- 16. Inelastic Response of Structures.

Sommario/riassunto

This book presents new methods and tools for the integration and simulation of smart devices. The design approach described in this book explicitly accounts for integration of Smart Systems components and subsystems as a specific constraint. It includes methodologies and EDA tools to enable multi-disciplinary and multi-scale modeling and design, simulation of multi-domain systems, subsystems and components at all levels of abstraction, system integration and exploration for optimization of functional and non-functional metrics. By covering theoretical and practical aspects of smart device design, this book targets people who are working and studying on hardware/software modelling, component integration and simulation under different positions (system integrators, designers, developers, researchers, teachers, students etc.). In particular, it is a good introduction to people who have interest in managing heterogeneous components in an efficient and effective way on different domains and different abstraction levels. People active in smart device development can understand both the current status of practice and future research directions.

- Provides a comprehensive overview of smart systems design, focusing on design challenges and cutting-edge solutions;
- Enables development of a co-simulation and co-design environment that accounts for the peculiarities of the basic subsystems and components to be integrated;
- Describes development of modeling and design techniques, methods and tools that enable multi-domain simulation and optimization at various levels of abstraction and across different technological domains.
