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Titolo	Data Science for Transport : A Self-Study Guide with Computer Exercises // by Charles Fox
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Descrizione fisica	1 online resource (XVII, 185 p. 77 illus., 49 illus. in color.)
Collana	Springer Textbooks in Earth Sciences, Geography and Environment, , 2510-1307
Disciplina	307.12
Soggetti	Regional planning City planning Transportation engineering Traffic engineering Statistics Computers Regional economics Space in economics Landscape/Regional and Urban Planning Transportation Technology and Traffic Engineering Statistics and Computing/Statistics Programs Information Systems and Communication Service Regional/Spatial Science
Lingua di pubblicazione	Inglese
Formato	Materiale a stampa
Livello bibliografico	Monografia
Nota di contenuto	Preface/ Foreword (professional public transport analyst -- Introduction -- What is Data Science? -- Introduction to Python programming -- Database Design -- Data Munging -- Spatial Data -- Bayesian Interference -- Discriminative Classification -- Spatial Analysis -- Data Visualisation -- Database Scaling -- Professional Issues -- Appendix -- Index.
Sommario/riassunto	This book offers a unique introduction to the application of data science for transport professionals and students of transport studies.

Based on a course taught by the Leeds Institute for Transport Studies, the world's leading center for training transport professionals, it represents the first textbook in this new area. As transportation planning has become increasingly data-driven, all graduate students and transport professionals urgently need to update their skills to include databases, machine learning, Bayesian statistics, geographic information system (GIS), and big data tools. Similarly, transport professionals including national and local government planners, transport consultants, and car company engineers are called upon to integrate these disparate areas with a specific focus on transportation issues, such as maps. The textbook also features a downloadable software package with all of the open source tools and libraries used in code examples throughout the book, including Python, Spyder, PostGIS, PyMC and GPy installations. As such, it offers a unique resource for graduate/advanced undergraduate students and instructors in transportation studies, urban and regional planning, engineering and geography, as well as transportation professionals.
