



1st ed. 2018, XVII, 185 p. 77 illus., 49 illus. in color.

Printed book

Hardcover

76,99 € | £67.99 | \$89.99

^[1]82,38 € (D) | 84,69 € (A) | CHF 91,00

Softcover

76,99 € | £64.99 | \$89.99

^[1]82,38 € (D) | 84,69 € (A) | CHF 91,00

eBook

64,19 € | £51.99 | \$69.99

^[2]64,19 € (D) | 64,19 € (A) | CHF 72,50

Available from your library or springer.com/shop

MyCopy ^[3]

Printed eBook for just

€ | \$ 24.99

springer.com/mycopy

Charles Fox

Data Science for Transport

A Self-Study Guide with Computer Exercises

Series: Springer Textbooks in Earth Sciences, Geography and Environment

- Introduces data science for students of transport studies, geography and the geosciences, as well as transport professionals
- The only book to integrate the whole stack of transport data analysis
- Addresses a range of aspects, from setting up practical database software and scraping web data, to Bayesian analysis, dashboard visualization, big data, and privacy ethics
- Comes with an easy-to-use software installer that sets up the complete software stack to run the Python, GIS, machine learning, and big data examples

The quantity, diversity and availability of transport data is increasing rapidly, requiring new skills in the management and interrogation of data and databases. Recent years have seen a new wave of 'big data', 'Data Science', and 'smart cities' changing the world, with the Harvard Business Review describing Data Science as the "sexiest job of the 21st century". Transportation professionals and researchers need to be able to use data and databases in order to establish quantitative, empirical facts, and to validate and challenge their mathematical models, whose axioms have traditionally often been assumed rather than rigorously tested against data. This book takes a highly practical approach to learning about Data Science tools and their application to investigating transport issues. The focus is principally on practical, professional work with real data and tools, including business and ethical issues. "Transport modeling practice was developed in a data poor world, and many of our current techniques and skills are building on that sparsity. In a new data rich world, the required tools are different and the ethical questions around data and privacy are definitely different. I am not sure whether current professionals have these skills; and I am certainly not convinced that our current transport modeling tools will survive in a data rich environment. This is an exciting time to be a data scientist in the transport field.

Order online at springer.com / or for the Americas call (toll free) 1-800-SPRINGER / or email us at: customerservice@springernature.com. / For outside the Americas call +49 (0) 6221-345-4301 / or email us at: customerservice@springernature.com.

The first € price and the £ and \$ price are net prices, subject to local VAT. Prices indicated with [1] include VAT for books; the €(D) includes 7% for Germany, the €(A) includes 10% for Austria. Prices indicated with [2] include VAT for electronic products; 19% for Germany, 20% for Austria. All prices exclusive of carriage charges. Prices and other details are subject to change without notice. All errors and omissions excepted. [3] No discount for MyCopy.

