VISUAL INSIGHTS
A Practical Guide to Making Sense of Data
Katy Börner & David E. Polley

This textbook offers a gentle introduction to the design of insightful visualizations. It seamlessly blends theory and practice, giving readers both the theoretical foundation and the practical skills necessary to render data into insights.

“This book is the first serious attempt at offering a theoretical and practical introduction to this discipline. I foresee that it’ll become the textbook of choice for many instructors.”
—Alberto Cairo, author of The Functional Art: an Introduction to Information Graphics and Visualization

The first chapter introduces a theoretical framework that covers temporal, geospatial, topical, and network data analyses and visualizations. It is followed by chapters that detail visualizations and workflows that aim to answer “when” (temporal data), “where” (geospatial data), “what” (topical data), and “with whom” (trees and networks) questions. The design and deployment of interactive online visualizations is discussed. Each chapter has a hands-on part that demonstrates how plug-and-play macroscope tools can be used to run advanced data mining and visualization algorithms. The final two chapters present exemplary case studies and discuss future developments.

The book accompanies the Information Visualization MOOC that attracts students, scholars, and practitioners from many fields of science and from all over the world.