



280 Pages

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MATLAB is a powerful data analysis program, but many behavioral science researchers find it too daunting to learn and use. **An Introduction to MATLAB for Behavioral Researchers** is an easy-to-understand, hands-on guide for behavioral researchers who have no prior programming experience. Written in a conversational and non-intimidating style, the author walks students—step by step—through analyzing real experimental data. Topics covered include the basics of programming, the implementation of simple behavioral analyses, and how to make publication-ready figures. More advanced topics such as pseudo-randomization of trial sequences to meet specified criteria and working with psycholinguistic data are also covered. Interesting behavioral science examples and datasets from published studies, such as visualizing fixation patterns in eye-tracking studies and animal search behavior in two-dimensional space, help develop an intuition for data analysis, which is essential and can only be developed when working with real research problems and real data.

FEATURES/NEW TO THIS EDITION

KEY FEATURES:

- **A problem-driven approach** specifically developed for behavioral researchers with no prior programming experience helps readers become confident with MATLAB by working through real examples.
- **End-of-chapter exercises** (with solutions provided in an appendix) give readers practice working through the book's instructions, offering opportunities for readers to apply topics learned to their own research.
- **Comprehensive example datasets cover a large variety of behavioral** studies to highlight commonalities in analysis approaches and enhance generalization learning and problem-solving.
- **Numerous screenshots** illustrate the step-by-step procedures in MATLAB and enhance learning.