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12. Hands-on Writing Experiments.

Sommario/riassunto

The second edition of this textbook provides a comprehensive and detailed overview of MATLAB and specific tools for creating experiments and analysing data in psychology. In addition to an enhanced focus on connections with external devices and writing experiments, all chapters have been thoroughly revised and updated to provide the latest information and examples compatible with the most recent versions of MATLAB. All scripts have been tested to ensure a reliable and exact response. In addition, the book provides detailed examples of classic experiments (e.g., the Posner task) as well as recommendations for structuring and implementing ad hoc experiments. Each chapter is accompanied by several illustrations, examples, and code to match every reader's expertise and comfort level. This concise volume demonstrates MATLAB's responsiveness to individuals' research needs, whether the task is programming experiments, creating sensory stimuli, running simulations, or calculating statistics for data analysis. Key areas of coverage include: Thinking in a matrix way. Handling and plotting data. Guidelines for improved programming, sound, and imaging. Statistical analysis and signal detection theory. Psychophysics Toolbox and its use in connection with external devices. MATLAB for Psychologists, Second Edition, serves a wide audience of advanced undergraduate and graduate level psychology students, professors, and researchers as well as lab technicians and other professionals involved in programming psychology experiments.