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Milton, Michael

Head first data analysis. A learner's guide to big numbers, statistics, and good decisions.

Köln: O'Reilly (ISBN 978-0-596-15393-9; 978-0-596-80636-1/ebook). xxxviii, 445 p. \$ 49.99; £ 38.50; \$ 54.99/print and e-book (2009).

The need for such a Data Analysis book could be justified by the fact that many existing Data Analysis textbooks are written at academically rigorous and the students rather than scare him to inspire and bring him all the knowledge on this branch of mathematics. This Data Analysis book tries to take more on the psychology of learning and fun with many images and slogans interspersed with high entertainment value. At first glance, it is fun here and more entertaining than the usual way one finds it in a textbook example of secondary school or university. We read in the introduction, which initially contains 38 pages (page count i–xxxviii), “We used pictures, because your brain is turned for visuals, not text.” (p. xxxii), or the phrase “We used concepts and pictures in unexpected ways because your brain is turned for novelty, and we used pictures and ideas with at least some emotional content, because your brain is turned to pay attention to the biochemistry of emotions.” (p. xxvii). Thus the audience is clear on who uses the book: a learner in an entertaining way to get access to data analysis and for the usual school books focus too tight and too severe are constructed. After the aforementioned introduction now 445 pages full text part follow. including a 11-page comprehensive keyword index. The latter suggests that here the fundamental principles of a one-semester Data Analysis lecture for non-technical disciplines at a university will be painted over with the usual teaching content: Introduction to Data Analysis, Experiments and Optimization, Data visualization, Hypothesis testing, Bayesian Statistics, Subjective Probabilities and Heuristics, Histograms, Regression, Error, Cleaning Data and Relational Databases, finally Install R and Install Excel Analysis Tools. Engineering students of a university would be more likely as easy to read the book by L. Sachs and J. Hedderich, “Angewandte Statistik, Methodensammlung mit R” ISBN 978-3-540-88901-4 (13th edition 2009. 2nd engl. edition see Zbl 0556.62002), which provides the same content and more and does not require an ornament and no funny sayings.

Ludwig Paditz (Dresden)

Classification: K90

Keywords: data analysis for non-mathematicians; data visualization; hypothesis testing; cleaning data; Excel analysis tools and R