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This book is intended primarily as a handbook for engineers who must design practical systems. Its primary goal is to discuss model development in sufficient detail so that the reader may design an estimator that meets all application requirements and is robust to modeling assumptions. Since it is sometimes difficult to a priori determine the best model structure, use of exploratory data analysis to define model structure is discussed. Methods for deciding on the "best" model are also presented. A second goal is to present little known extensions of least squares estim

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