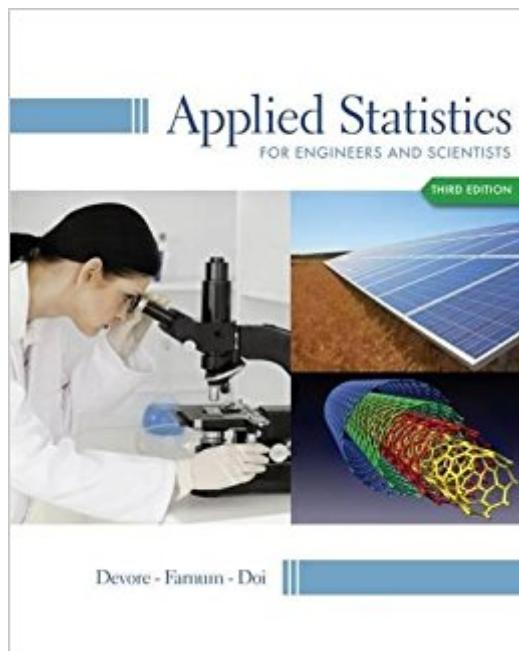


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# Applied Statistics For Engineers And Scientists



## **Synopsis**

This concise book for engineering and sciences students emphasizes modern statistical methodology and data analysis. APPLIED STATISTICS FOR ENGINEERS AND SCIENTISTS emphasizes application of methods to real problems, with real examples throughout. Available with InfoTrac Student Collections <http://gocengage.com/infotrac>.

## **Book Information**

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Jay Devore is Professor Emeritus of Statistics at California Polytechnic State University. He earned his undergraduate degree in Engineering Science from the University of California at Berkeley, spent a year at the University of Sheffield in England, and finished his Ph.D. in statistics at Stanford University. Jay previously taught at the University of Florida and at Oberlin College and has had visiting appointments at Stanford, Harvard, the University of Washington, New York University, and Columbia University. From 1998 to 2006, he served as Chair of the Cal Poly Statistics Department. In addition to this book, Jay has written several other widely used statistics texts for engineers and scientists and a book in applied mathematical statistics. He recently coauthored a text in probability and stochastic processes. He is the recipient of a distinguished teaching award from Cal Poly, is a Fellow of the American Statistical Association, and has served several terms as an Associate Editor of the "Journal of the American Statistical Association." In his spare time, he enjoys reading, cooking and eating good food, tennis, and travel to faraway places. He is especially proud of his wife, Carol, a retired elementary school teacher, his daughter Allison, who has held several high-level positions in nonprofit organizations in Boston and New York City, and his daughter Teresa, a high school teacher in Brooklyn. Nicholas Farnum received his B.S. and Ph.D. in Mathematics from University of California at Irvine. He is currently a professor in the Information

Systems and Decision Sciences Department at California State University, Fullerton. Professor Farnum has published several papers in applied and theoretical statistics and has also written texts in Quality Control and Forecasting. He is a member of the American Statistical Association and the Mathematical Association of America. In his spare time Professor Farnum enjoys cooking, playing music, and traveling. Jimmy Doi earned his B.A. in Mathematics (minors in Biology, Chemistry, Japanese) from California State University, Northridge. He earned his masters and Ph.D. in Statistics at North Carolina State University. Since receiving his doctorate Professor Doi has been on the faculty in the Statistics Department at California Polytechnic State University, San Luis Obispo. His research interests include biostatistics and categorical data analysis. He enjoys traveling, kayak fishing, long board surfing, and playing basketball with his current and former students. But his favorite moments are when he spends time with his wife Midori and daughter Alicia.

This book did not explain the mathematical theory behind the calculation and use of the various statistical methods it presented. It merely showed how to obtain the desired results. Engineers and scientists of all people need to understand these things in order to avoid the misuse of statistical methods which is so prevalent. How can outliers be reasonably identified? What does "degrees of freedom" really mean? Is a sample arbitrarily chosen from a group of random subsamples of a larger random sample still random? Sadly with this textbook students will learn to use statistics as a drunkard uses a lamppost: for support rather than illumination. A second but less important omission: the homework questions make odd use of example data from real research papers. The data sets chosen are very small, even though all data sets are available for download in multiple file formats. Each question introduces a new study with a brief paragraph that somehow fails to reproducibly define the experiments actually performed. This makes for a lot of irrelevant reading and students quickly learn to skip this part of each question. Given that scientists and engineers will presumably be designing experiments, why not include some related details? Merely describing the data makes no logical contribution, except perhaps to suggest an "expected" outcome. I have a degree in math and am seeking a degree in mechanical engineering.

I learned a lot from this book, but it could be written a little better. More examples can be given, and rather than assuming prior knowledge, it should re-explain the abbreviations they use and some of the more technical concepts, and show clearer step by step instructions.

had to order for class

Very expensive for a book full of typos, not very helpful explanations of concepts. Suggest professors make better, more economical choices for required text.

Hard to read and understand what being explained. Will make you feel like reading paragraphs in an essay. Not a good one for basic level!

This text book was ok for the first few section but between the errors in the problem sections and how he words the book your better off watching you tube videos. I would not recommend this book to any one.

Great!

Even my professor admitted that this wasn't the greatest book out there. Some of the simple things are drawn out with explanation while other, more complex topics, are covered once with virtually no explanation. It could be better, but still not bad.

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