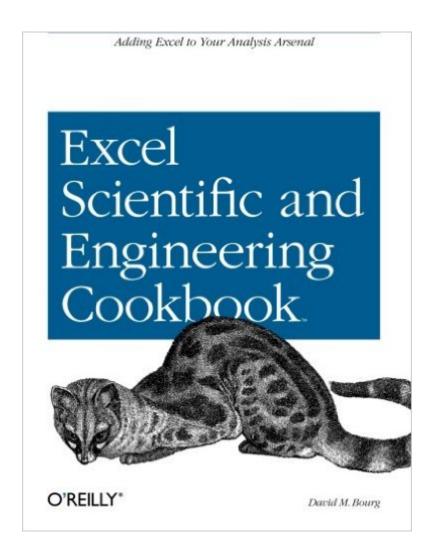
## The book was found

# Excel Scientific And Engineering Cookbook (Cookbooks (O'Reilly))





# **Synopsis**

Given the improved analytical capabilities of Excel, scientists and engineers everywhere are using it--instead of FORTRAN--to solve problems. And why not? Excel is installed on millions of computers, features a rich set of built-in analyses tools, and includes an integrated Visual Basic for Applications (VBA) programming language. No wonder it's today's computing tool of choice. Chances are you already use Excel to perform some fairly routine calculations. Now the Excel Scientific and Engineering Cookbook shows you how to leverage Excel to perform more complex calculations, too, calculations that once fell in the domain of specialized tools. It does so by putting a smorgasbord of data analysis techniques right at your fingertips. The book shows how to perform these useful tasks and others: Use Excel and VBA in general Import data from a variety of sourcesAnalyze dataPerform calculationsVisualize the results for interpretation and presentationUse Excel to solve specific science and engineering problemsWherever possible, the Excel Scientific and Engineering Cookbook draws on real-world examples from a range of scientific disciplines such as biology, chemistry, and physics. This way, you'll be better prepared to solve the problems you face in your everyday scientific or engineering tasks. High on practicality and low on theory, this quick, look-up reference provides instant solutions, or "recipes," to problems both basic and advanced. And like other books in O'Reilly's popular Cookbook format, each recipe also includes a discussion on how and why it works. As a result, you can take comfort in knowing that complete, practical answers are a mere page-flip away.

#### **Book Information**

Series: Cookbooks (O'Reilly)

Paperback: 446 pages

Publisher: O'Reilly Media; 1 edition (January 27, 2006)

Language: English

ISBN-10: 0596008791

ISBN-13: 978-0596008796

Product Dimensions: 7 x 1.1 x 9.2 inches

Shipping Weight: 1.4 pounds (View shipping rates and policies)

Average Customer Review: 4.1 out of 5 stars Â See all reviews (18 customer reviews)

Technology > Software > Personal Finance #62 in Books > Computers & Technology > Software

Best Sellers Rank: #356,293 in Books (See Top 100 in Books) #51 in Books > Computers &

> Accounting #243 in Books > Computers & Technology > Software > Mathematical & Statistical

## **Customer Reviews**

It is often either inconvenient or financially unfeasible to solve every mathematical problem with a standalone procedural language or an expensive application such as Matlab or Mathematica. Since Excel has such advanced computational capabilities built into it and is ubiquitous in offices and homes, it would make sense to mine this application for numerical problem solving techniques. Bourg does a masterful job of presenting the tools available in Excel and showing the reader how to put them to work to solve real world engineering and mathematical problems. First, he spends a couple of chapters briefly going over Excel and its language VBA (Visual Basic for Applications). Next he goes over some intermediate level tasks such as collecting and cleaning up data, charting including 3D charts, and statistical analysis tasks such as correlating data and generating random numbers. Next Bourg moves into purely mathematical tasks such as working with discrete Fourier transforms, manipulating matrices and vectors, as well as working with basic mathematical functions. Once you have learned to use these mathematical tools in Excel, Bourg uses them to show you how to perform curve fitting and regression, solve equations, perform integration and differentiation, and solve both ordinary and partial differential equations. He even spends time on performing multivariable calculus and the finite element method in Excel. Chapter 13, on optimization, was my favorite chapter. Here, Bourg is actually getting into a little algorithm analysis and design via linear programming and genetic algorithms. This chapter showed me some truly innovative uses of Excel. The final chapter deviates from the scientific flavor of the book and concentrates on more traditional financial applications.

#### Download to continue reading...

Excel Scientific and Engineering Cookbook (Cookbooks (O'Reilly)) Excel: The Complete Beginners Guide - Boost Your Poductivity And Master Excel In Just 24 Hours! (Excel, Microsoft Office, MS Excel 2016) Free Cookbooks: Box Set: The Complete Healthy And Delicious Recipes Cookbook Box Set(30+ Free Books Included!) (Free Cookbooks, Free, Cookbooks, Recipes, Easy, Quick, Cooking,) bash Cookbook: Solutions and Examples for bash Users (Cookbooks (O'Reilly)) SQL Cookbook (Cookbooks (O'Reilly)) JUNOS Cookbook (Cookbooks (O'Reilly)) XSLT Cookbook (Cookbooks (O'Reilly)) BILL O'REILLY - SERIES READING ORDER (SERIES LIST) - IN ORDER: KILLING JESUS, KILLING PATTON, KILLING LINCOLN, KILLING KENNEDY, KILLING REAGAN, HITLER'S LAST DAYS, THE O'REILLY FACTOR & MANY MORE! Haunted Tales - A Mary O'Reilly Paranormal Mystery - Book Fifteen (Mary O'Reilly Series 15) Deadly Circumstances - A Mary O'Reilly Paranormal Mysteries) Frayed Edges - A

Mary O'Reilly Paranormal Mystery (Book Seventeen) (Mary O'Reilly Paranormal Mysteries Series 17) Recipes: Box Set: The Complete Healthy And Delicious Recipes Cookbook Box Set(30+ Free Books Included!) (Recipes, Healthy Cooking, Recipe Books, Diets, Cooking, Cookbooks, Diet Cookbooks,) Anti Inflammatory Cookbook - 50 Slow Cooker Recipes With Anti - Inflammatory Ingredients - (Great For Gout Relief!) Crockpot Recipes, Slow Cooker Recipes, (Low Cooker Cookbooks, Crockpot Cookbooks) Best of the Best from Hawaii Cookbook: Selected Recipes from Hawaii's Favorite Cookbooks (Best of the Best State Cookbooks) EXCEL: Strategic Use of the Calc Spreadsheet in Business Environment. Data Analysis and Business Modeling (Functions and Formulas, Macros, MS Excel 2016, Shortcuts, Microsoft Office) Excel VBA Programming: Learn Excel VBA Programming FAST and EASY! (Programming is Easy Book 9) Excel Conditional Formatting: Tips You Can Use Immediately To Make Your Data Stand Out (Data Analysis With Excel Book 3) Cookbooks for Fans: Dallas Football Outdoor Cooking and Tailgating Recipes: Cookbooks for Cowboy FANS ~ Barbecuing & Grilling Meat & Game (Outdoor Cooking ... ~ American Football Recipes Book 3) Breakfast Meals Made Simple Cookbooks: 100 Sensation Breakfast Recipes - Healthy food (Breakfast, Meals Made Simple, Breakfast cookbooks, Breakfast recipes, Breakfast ...: 100 Sensation Breakfast Recipes) Southern Cooking Cookbooks: southern cooking recipes Collection Of the Best, Healthy, Delicious And Recommended Soul Food Cookbook (soul food for diabetes, Southern Cookbook): Best Fried Chicken

<u>Dmca</u>