Statistics Hacks

By Bruce Frey

.....

Publisher: O'Reilly Pub Date: May 2006

Print ISBN-10: **0-596-10164-3** Print ISBN-13: **978-0-59-610164-0**

Pages: 356

<u>Table of Contents</u> | <u>Index</u>

credits Credits.

Preface.

Chapter 1. The Basics

Hack 1. Know the Big Secret

Hack 2. Describe the World Using Just Two Numbers

Hack 3. Figure the Odds.

Hack 4. Reject the Null

Hack 5. Go Big to Get Small

Hack 6. Measure Precisely.

Hack 7. Measure Up.

Hack 8. Power Up.

Hack 9. Show Cause and Effect

Hack 10. Know Big When You See It

Chapter 2. Discovering Relationships

Hack 11. Discover Relationships

Hack 12. Graph Relationships.

Hack 13. Use One Variable to Predict Another

Hack 14. Use More Than One Variable to Predict Another

Hack 15. Identify Unexpected Outcomes

Hack 16. Identify Unexpected Relationships

Hack 17. Compare Two Groups.

Hack 18. Find Out Just How Wrong You Really Are

Hack 19. Sample Fairly.

Hack 20. Sample with a Touch of Scotch

Hack 21. Choose the Honest Average

Hack 22. Avoid the Axis of Evil

Chapter 3. Measuring the World

Hack 23. See the Shape of Everything

Hack 24. Produce Percentiles.

Hack 25. Predict the Future with the Normal Curve

Hack 26. Give Raw Scores a Makeover

Hack 27. Standardize Scores

Hack 28. Ask the Right Questions.

- Hack 29. Test Fairly.
- Hack 30. Improve Your Test Score While Watching Paint Dry
- Hack 31. Establish Reliability
- Hack 32. Establish Validity.
- Hack 33. Predict the Length of a Lifetime
- Hack 34. Make Wise Medical Decisions.
- Chapter 4. Beating the Odds
- Hack 35. Gamble Smart
- Hack 36. Know When to Hold 'Em
- Hack 37. Know When to Fold 'Em
- Hack 38. Know When to Walk Away.
- Hack 39. Lose Slowly at Roulette
- Hack 40. Play in the Black in Blackjack
- Hack 41. Play Smart When You Play the Lottery.
- Hack 42. Play with Cards and Get Lucky.
- Hack 43. Play with Dice and Get Lucky
- Hack 44. Sharpen Your Card-Sharping
- Hack 45. Amaze Your 23 Closest Friends.
- Hack 46. Design Your Own Bar Bet
- Hack 47. Go Crazy with Wild Cards
- Hack 48. Never Trust an Honest Coin
- Hack 49. Know Your Limit
- Chapter 5. Playing Games.
- Hack 50. Avoid the Zonk
- Hack 51. Pass Go, Collect \$200, Win the Game
- Hack 52. Use Random Selection as Artificial Intelligence
- Hack 53. Do Card Tricks Through the Mail
- Hack 54. Check Your iPod's Honesty
- Hack 55. Predict the Game Winners.
- Hack 56. Predict the Outcome of a Baseball Game.
- Hack 57. Plot Histograms in Excel
- Hack 58. Go for Two.
- Hack 59. Rank with the Best of Them
- Hack 60. Estimate Pi by Chance
- Chapter 6. Thinking Smart
- Hack 61. Outsmart Superman
- Hack 62. Demystify Amazing Coincidences
- Hack 63. Sense the Real Randomness of Life.
- Hack 64. Spot Faked Data
- Hack 65. Give Credit Where Credit Is Due
- Hack 66. Play a Tune on Pascal's Triangle
- Hack 67. Control Random Thoughts.
- Hack 68. Search for ESP.
- Hack 69. Cure Conjunctionitus.
- Hack 70. Break Codes with Etaoin Shrdlu
- Hack 71. Discover a New Species.
- Hack 72. Feel Connected

Hack 73. Learn to Ride a Votercycle

Hack 74. Live Life in the Fast Lane (You're Already In)

Hack 75. Seek Out New Life and New Civilizations

Colophon

Index