Crafting with Data

Reality, Illusions, Truth & the Future

Instructor: Rob Faludi

Plan for Today

- Class documentation and discussion
- Discuss reading in chapters
- Exercise One: Article report
- Demo: Arduino Data gathering
- Readings & Assignments

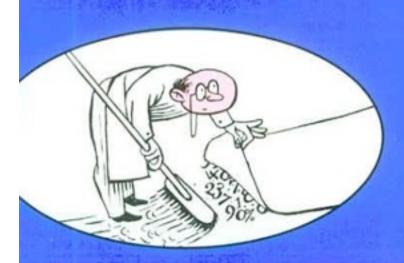
Class Documentation & Discussion

- Send me links for your documentation of <u>every</u> assignment
 - what you did, what you found, what you learned, pictures, video, links
 - due along with with assignment

• Discussion List, sign up now if you haven't already

HOW TO LIB WITH STATISTICS

Darrell Huff Illustrated by Irving Geis



Over Half a Million Copies Sold— An Honest-to-Goodness Bestseller The Sample with the Built-in Bias

The Well-Chosen Average

The Little Figures That Are Not There

Much Ado about Practically Nothing

The Gee-Whiz Graph

The One-Dimensional Picture

The Semi-attached Figure

Post Hoc Rides Again

How to Statisticulate

How to Talk Back to a Statistic

...Final thoughts

Exercise One

- Article Presentation
 - In groups of 3, compare your articles and pick one to present
 - Present your chosen article to the class

Demo: Arduino Data Gathering

Readings and Assignments

- Readings
 - The Canon, by Natalie Angrier Chapter 1: Thinking Scientifically
 - The Scientific Method, Jose Wudka http://phyun5.ucr.edu/~wudka/ Physics7/Notes_www/node5.html
- Assignment
 - Use an Arduino to gather 500 samples of interesting data in two different conditions (1000 samples total). Post your data online so it can be downloaded.