Math 362: Mathematical Statistics II

Le Chen
le.chen@emory.edu

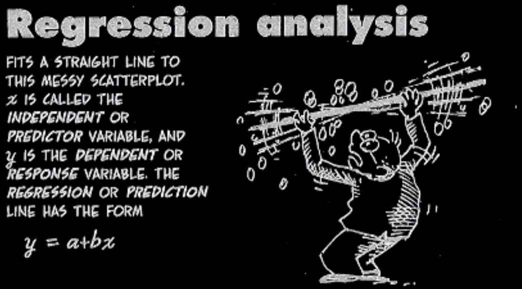
Emory University
Atlanta, GA

Last updated on April 13, 2021

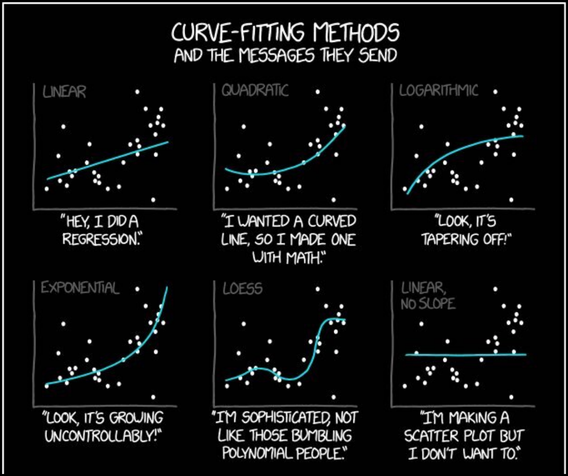
2021 Spring

Chapter 11. Regression

Plan



https://madhureshkumar.wordpress.com/



https://xkcd.com/

Three ways to view the same thing

$$(x_1, y_1), \cdots, (x_n, y_n)$$

1. Purely data, no probability structure assumed.

$$(x_1, Y_1), \cdots, (x_n, Y_n)$$

2. A random sample of size n, where Y_i follows a distribution depending on x_i which is deterministic.

$$(X_1, Y_1), \cdots, (X_n, Y_n)$$

3. A random sample of size n, where (X_i, Y_i) follow some joint distribution.

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