HackerMath

Intro to Statistics & Basics of Mathematics for Data Science

the hacker's way

Facilitators

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Three Key Questions

What statistic do you need?

What math do you need?

Why approach it the hacker's way?

Module 1: Statistics

Application to A/B Testing

Base Metrics

Direct Simulation

Shuffling

Hypothesis Testing

Module 2: Linear Algebra

Application: Supervised ML: Linear Regression

Solve $Ax = b$ for $n \times n$

Solve $Ax = b$ for $n \times p + 1$

Linear Regression*

L2 Regularization

Bootstrapping

Module 3: Linear Algebra - continued

Application: Unsupervised ML: Dimensionality Reduction

Solve $Ax = \lambda x$ for $n \times n$

Eigenvectors & Eigenvalues

Principle Component Analysis