

1145-F5-1261 **Gilbert Strang*** (gs@math.mit.edu). *Linear Algebra and Deep Learning*. Preliminary report.

Since teaching is best discussed using examples (and I don't have any theories about teaching, except to be active and enthusiastic and conscious of your audience), I would like to report on my experience with a new course and new book. The course builds to an analysis of neural nets and deep learning.

Machine learning is a very active topic, students and faculty want to learn about it ! The components are 1) Linear algebra 2) Statistics and probability 3) Optimization . (Received September 20, 2018)