Math derivation is not expected to be done.

F test and T test, what’s the fundamental difference?

**F test: variance** tells us the impact of a factor,

2-way anova, what is the important factor?

Hypothesis: if factor A has 3 lvels, the hypotehsis is that the sum of all three levels is equal to zero. (lecture 2)

**T-test: confidence interval.** Tells us the range of how accurate your estimate is.

T-test is much stronger. Can tell if factor A is significant

Initial assumption: Error follows Normal distribution, otherwise the whole reasoning is flawed.

Model is good if F-test is good.

But T-test is bad, meaning that not all terms are useful, so you can prune parameters

She does not ask for derivation. But how to intepret.

p-values: is the probabilties that the statistics going to the tail. You want that as small as possibile.

P < 0.05

Which distribution assumed for error term in ANOVA? Normal distribution. Why? Because all the statistic analysis is based o this.

Which confidence interval is not significant? Y=

Significant, paramters you estimate should include 0

Degree of freedoms tells which statistics to check. What does DOF.

You lose 1 degree of freedom  
  
#fac1 \* #fac2 \* (#replications-1)

Which statistics to check the significance of factor A in Anova

2 Factor model

A: 4 levels

Sum of square / dof

An effect model for 4 factos. What is the number of effects in ANOVA?

Check your anova table.

4 factors –> (2^4) -1

What is effect model?

How good are cathegorical variables.

2-level factorials. Is not good design.

You should use more factors.

What is the size of the sign table for a 2^3 with 3 replications experiment?

What’s sign table? Purely decided byu nymber of facrors. 8x8

What is not true about 2^(7.3 design with 3 replications

**Distributed Learning**

Better for Deep learning

Master node..

Worker nodes with independent databases.

Kubernets FLTK.

Details of FLTK.

1. extractor

2. Orchestrator: Experiment generator, pytorch job

3. pytorch train job