

One Initialization to Rule Them All

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Neural networks are very cool

- ▶ Images of cool applications.

But they can be very demanding

- ▶ Numbers for huge networks and how long it takes to train them.

One possible solution: pruning

- ▶ Explain pruning, iterative pruning, discuss known results so far.

Pruning can lead to Winning Tickets

- ▶ Explain what winning tickets are.

Question

Does weight initialization matter looking for Winning Tickets?

Method

Model

- ▶ Fully Connected.
- ▶ Two hidden layers: 300 & 100 neurons \rightarrow 266k weights.

Training

Pruning

- ▶ Used LeNet on MNIST and tried a bunch of different inits.
Nice summary on framework(s) used, how many lines of code written, how many epochs trained, etc.>

Results

- ▶ Nice graphs of pruning rate vs. test_acc.

Further Research

- ▶ What does this research lead to?

Questions?