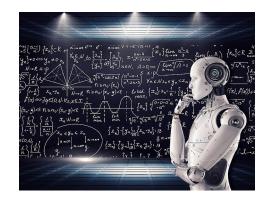
Hyperparameter Selection

Deep Learning Pre-Work

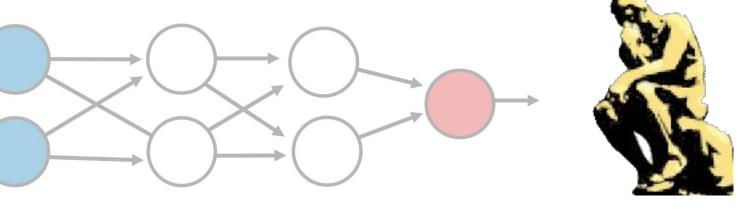


Machine Learning



Source: Wikimedia Commons

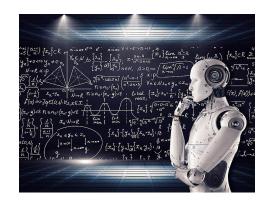
Hyperparameter Selection



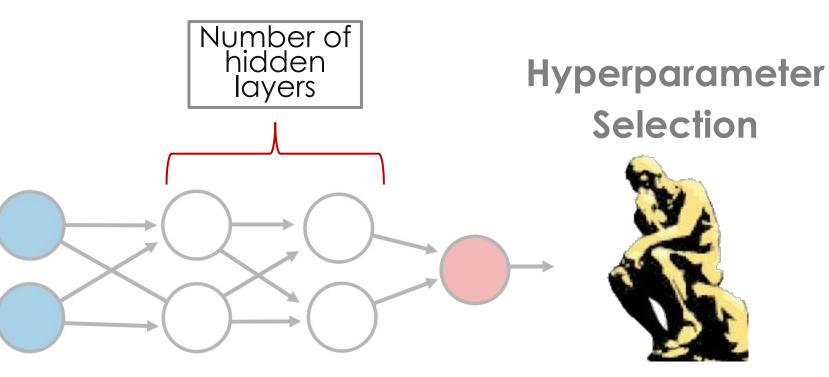
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Machine Learning

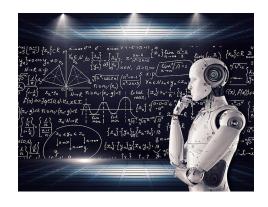


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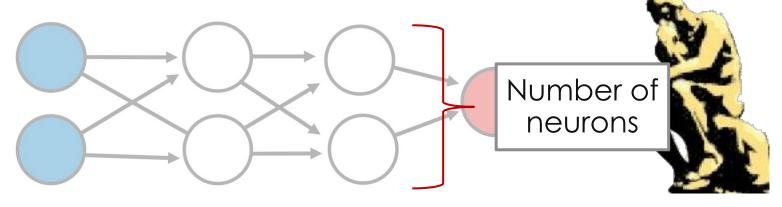


Machine Learning



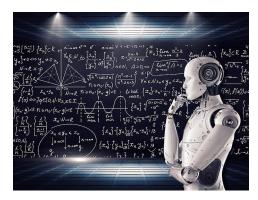
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Hyperparameter Selection

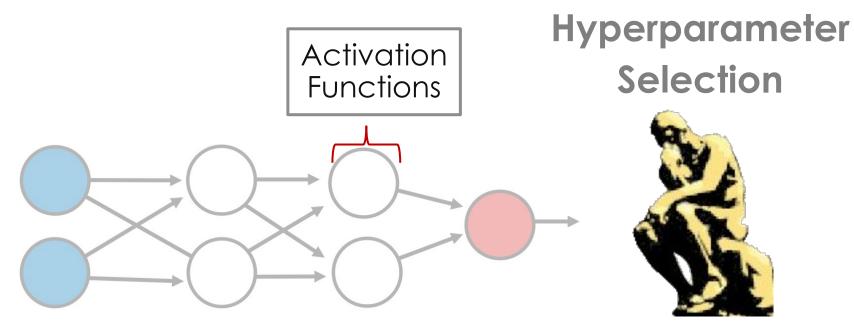




Machine Learning

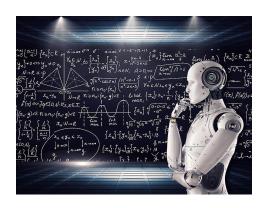


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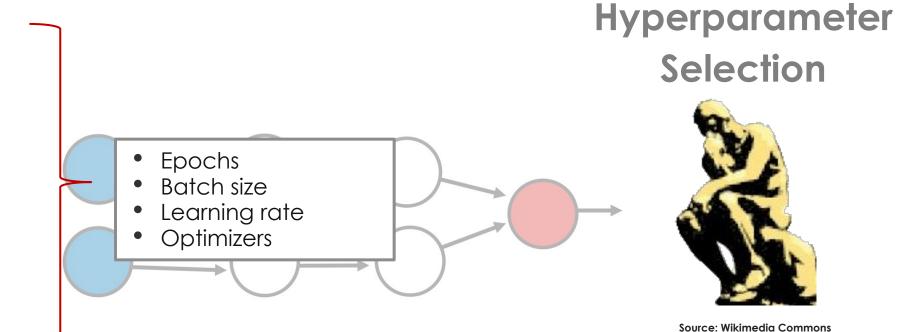




Machine Learning

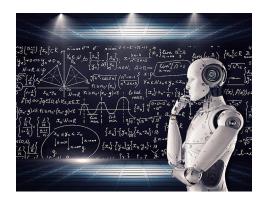


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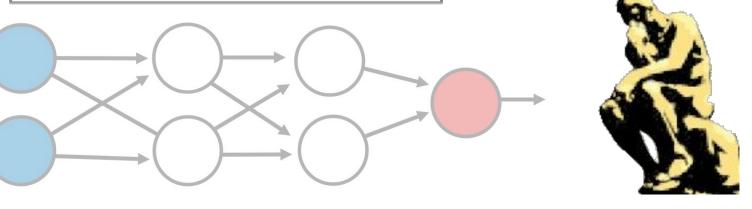
Machine Learning



Source: Wikimedia Commons

- Dropout rate
- Regularization
- Normalization Technique
- ...and more

Hyperparameter Selection



Tips and Strategies



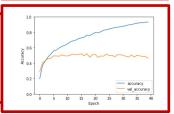
1) Don't reinvent the wheel



2) Start small and iterate



3) Look at loss plots



4) Tune hyperparameters



5) Don't worry about perfection



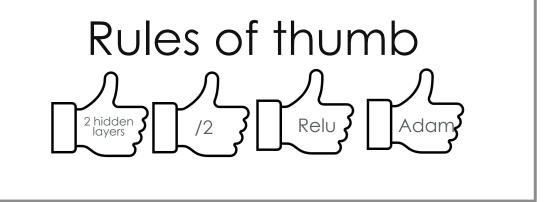
1. Don't reinvent the wheel





Previous projects





Google

Q deep learning predicting _____ X

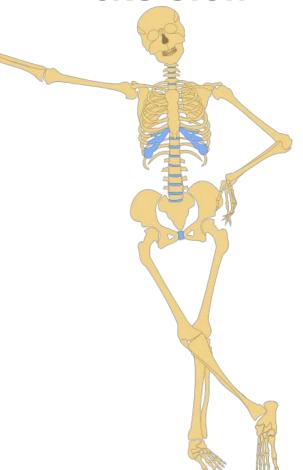
Google Search

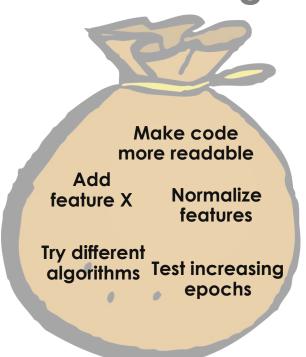
2. Start small and iterate

Great Learning

1. Build the skeleton

2. Collect ideas for enhancing



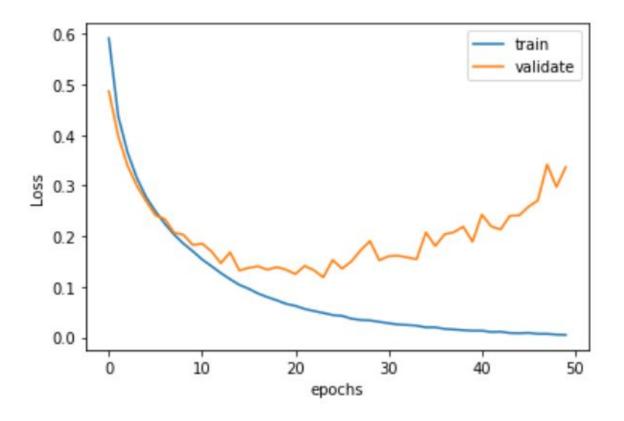


3. Implement one at a time until the deadline



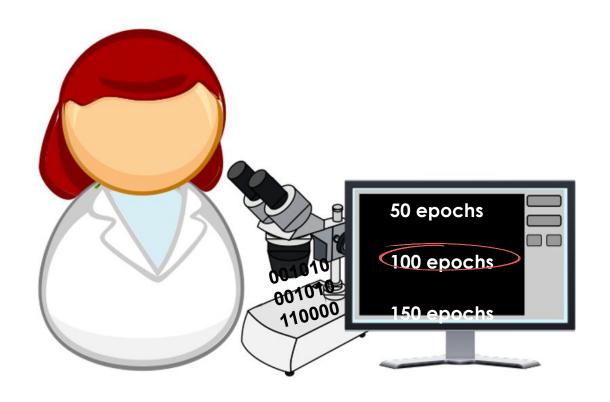
3. Look at loss plots





4. Tune hyperparameters





5. Don't worry about perfection



