

Chapter 4

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[Link to chapter](#)

1 Multilayer Perceptrons

- Incorporating Hidden Layers to network architecture
- Adding non linearity with activation functions

2 Implementation of Multilayer Perceptrons from Scratch

Similar to logistic/linear regression implementation involving

- Define the model (net) and initialise params
- Define the loss
- Define the optimizer (stepping in the direction of neg gradient)
- Implement training loop (using efficient mini batch data loaders)

3 Model Selection, Underfitting, and Overfitting

- here we go!

References

Zhang, A., Lipton, Z. C., Li, M., & Smola, A. J. (2020). *Dive into deep learning*.
(<https://d2l.ai>)