

Twitter Thread by elvis

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Machine Learning Notes

I've been writing notes introducing some of the most important topics in AI today.

This thread lists a few notes I've published so far:

```
torch.manual_seed(0)

# dense layer
class MyDenseLayer(torch.nn.Module):
    def __init__(self, input_dim, out_dim):
        super(MyDenseLayer, self).__init__()
        self.weight = torch.nn.Parameter(torch.randn(input_dim, out_dim))
        self.bias = torch.nn.Parameter(torch.randn(out_dim))

    def forward(self, x):
        z = x @ self.weight + self.bias
        output = torch.sigmoid(z)
        return output

X = torch.tensor([-1, 2], dtype=torch.float)
model = MyDenseLayer(2, 2)
y = model(X)
print(y)
```

Introduction to Machine Learning

<https://t.co/R0Ke8TkFbv>

Introduction to Deep Learning

<https://t.co/hqpLLugxis>

Introduction to Sequential Modeling

<https://t.co/SSS55WqEcp>

Introduction to Deep Computer Vision

<https://t.co/isn95b1jVk>

Deep Generative Modeling

<https://t.co/zEWPZmiuPF>

Deep Reinforcement Learning

<https://t.co/qJv4IewxOY>

Introduction to Simple Neural Networks for NLP

<https://t.co/TWCTG1IPa3>

Introduction to Word Vectors

<https://t.co/jJWGTKU80A>

Introduction to Transformers

<https://t.co/pRPxw8ilxk>

The notes need a lot more work but you can build on them as you like.

All the notes are organized here: <https://t.co/f3G6AReeQz>

Working on a few more notes. In particular, the notes on the "GPT-3 from scratch" lecture by Karpathy are almost ready.