

Convolutional Neural Networks

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1 Introduction

2 Why Do We Care?

3 But What is a Convolution?

The Discrete Case

The Continuous Case

4 NNs vs CNNs

5 Structure

6 Examples

(a) TODO

(b) TODO

7 Resources

[1] 3Blue1Brown - But What is a Convolution?
<https://www.youtube.com/watch?v=KuXjwB4LzSA&t=1s>

[2] 3Blue1Brown - Convolutions — Why X+Y in probability is a beautiful mess
<https://www.youtube.com/watch?v=IaSGqQa50-M>

[3] far1din - Convolutional Neural Networks from Scratch — In Depth
<https://www.youtube.com/watch?v=jDe5BAst2-Y>