

An Introduction to Convolutional Neural Networks (Pass 1)

Some guy in the UK, circa 2015

Useful links:

<https://arxiv.org/abs/1511.08458>

<https://paperswithcode.com/paper/an-introduction-to-convolutional-neural>

Category: What type of paper is this?

Brief overview of Convolutional Neural Networks

Context: What is it related to?

- Pattern Recognition
- Artificial Neural Networks
- Machine Learning
- Image Analysis

Correctness: Do the assumptions appear to be valid?

- This introduction assumes you are familiar with the fundamentals of ANNs and machine learning. Ehe
- Computational complexity = GPU go brrrr!

Contributions: What are the paper's main contributions?

- This document provides a brief introduction to CNNs, discussing recently published papers and newly formed techniques (accessible to beginners)
- "outlined the basic concepts of Convolutional Neural Networks, explaining the layers required to build one and detailing how best to structure the network in most image analysis tasks."
- Good Explanation: Convolutional Neural Networks differ from other forms of Artificial Neural Networks in that instead of focusing on the entirety of the problem, knowledge about the specific type of input is exploited.

Clarity: Is the paper well written?

Ten pages, Let's gooo!