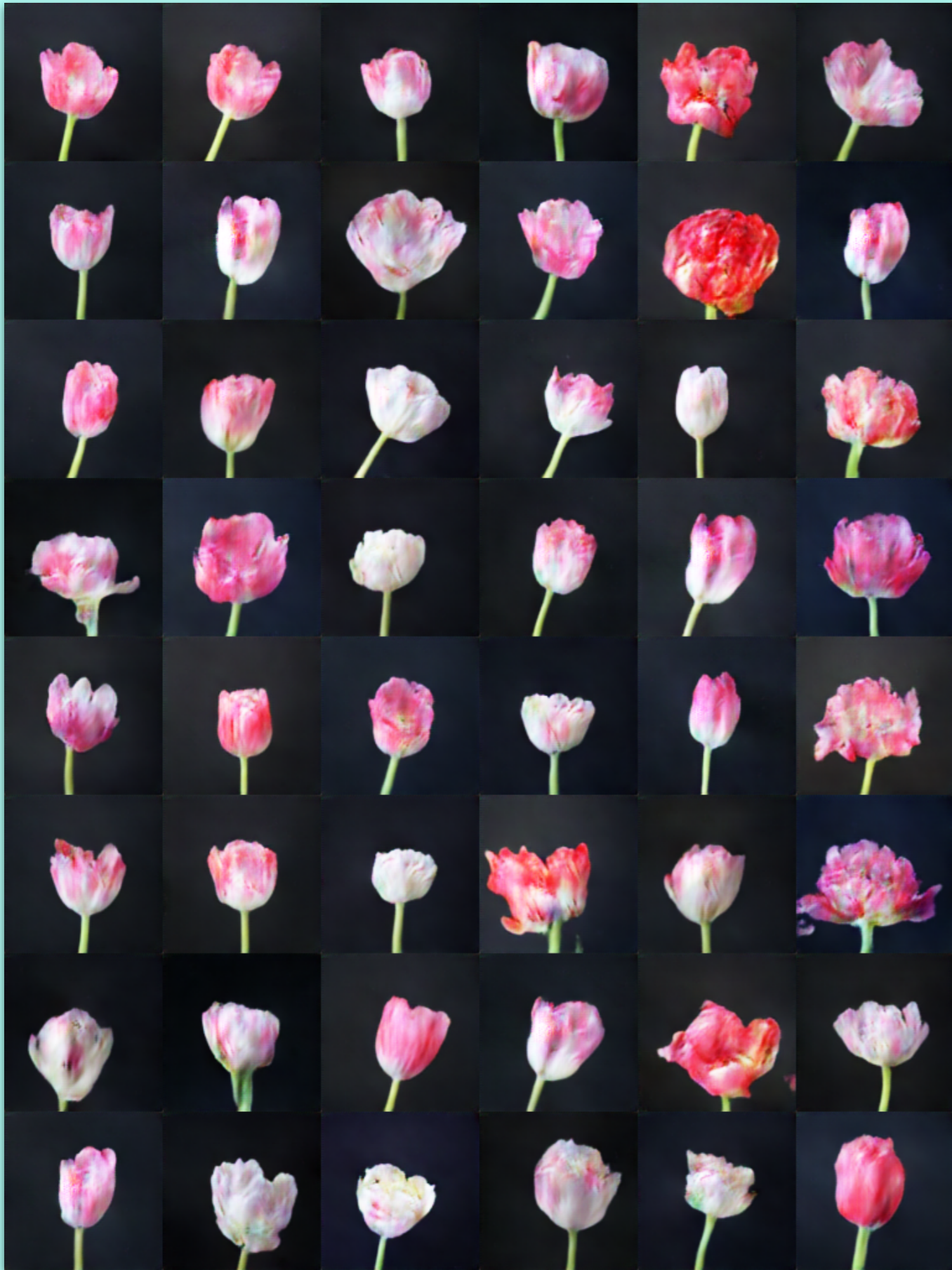


NEURAL NETWORKS & AESTHETICS

**Frieder Nake
A Workshop, Summer 2020**

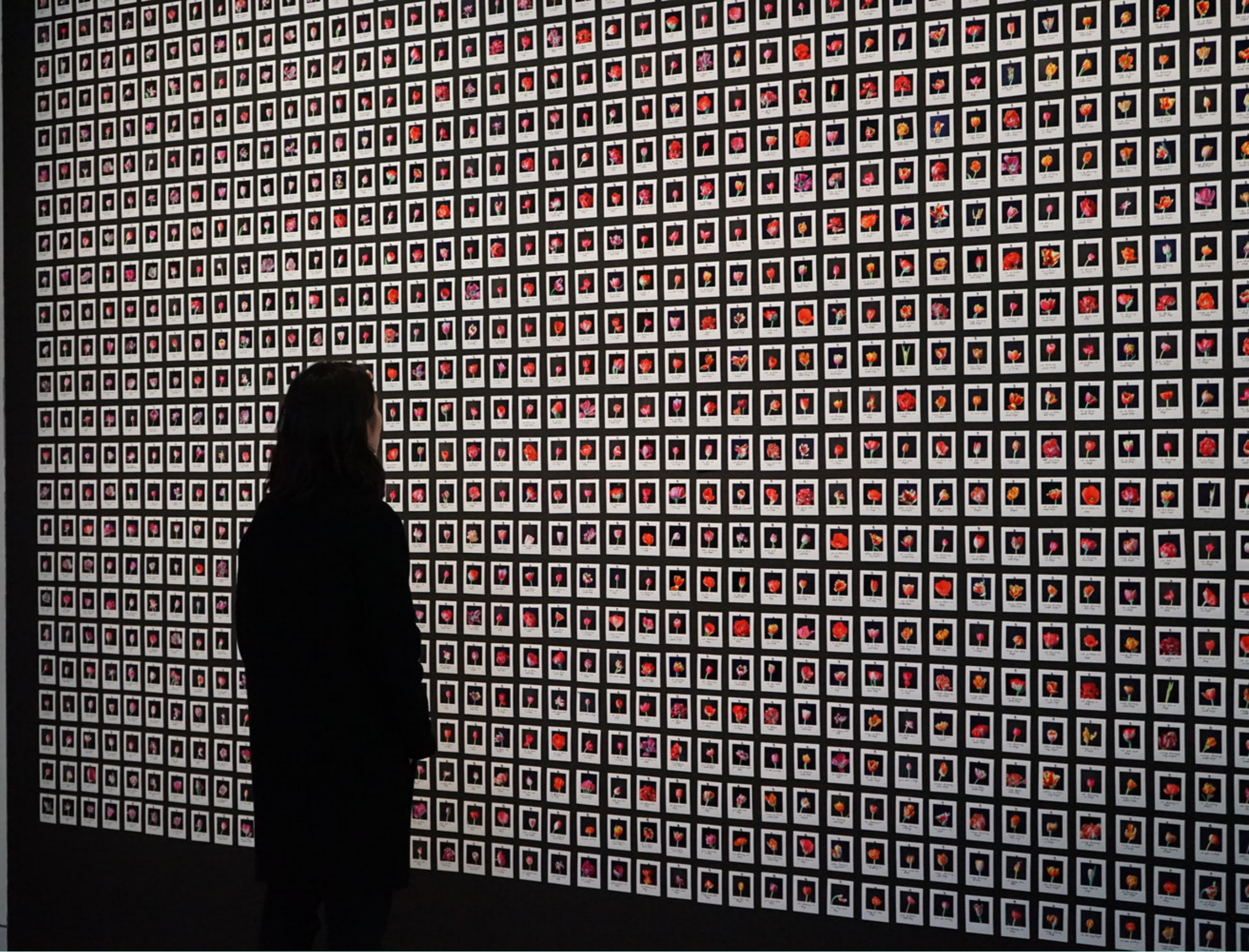
-day3-



Anna Ridler



Myriad (Tulips), 2018



<https://www.youtube.com/watch?v=xuutyjmhfw>

watch about 3 first minutes
listen carefully, discuss

get the two short papers by
VINCENT 2019
BODDINGTON 2019
from the compart website, Material.

we'll read at least one of them.

also get the longer paper by
INZAUGARAT 2019

“INTELLIGENCE”?

INTELLIGENCE?

capacity for logic

understanding

self-awareness

learning

emotional knowledge

reasoning

planning

creativity

critical thinking

problem-solving

INTELLIGENCE?

ability to perceive or infer **information**

to retain it as **knowledge**
(to be applied towards adaptive behaviors
within an environment or context)

INTELLIGENCE?

ability to perceive or infer **information**

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can a computer have or do this?

Neural Networks and Deep Learning

is a free online book.

The book will teach you about:

- Neural networks, a beautiful biologically-inspired programming paradigm which enables a computer to learn from observational data
- Deep learning, a powerful set of techniques for learning in neural networks

Neural networks and deep learning

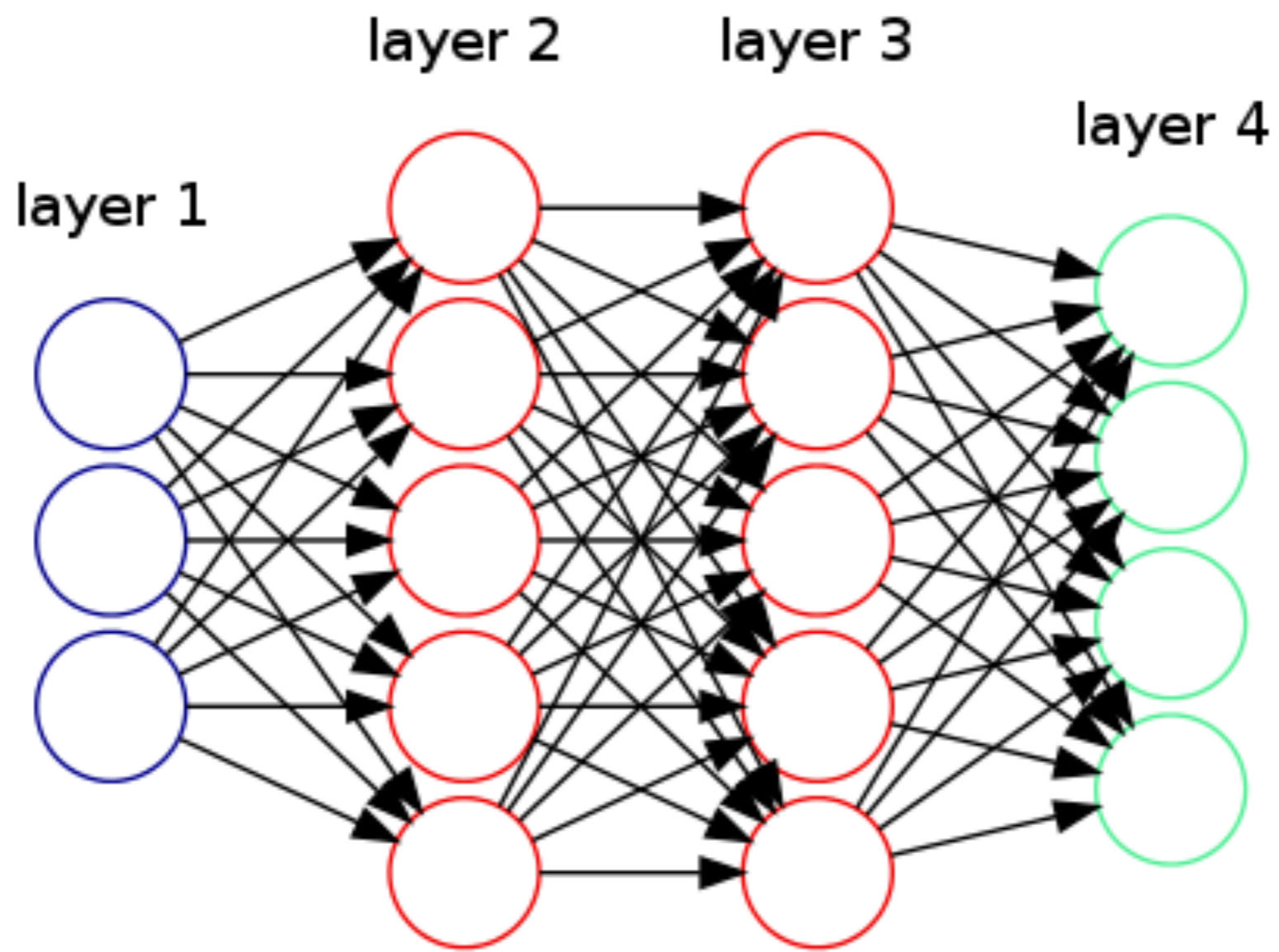
currently provide the best solutions to many problems

in image recognition,
speech recognition,
and natural language processing.

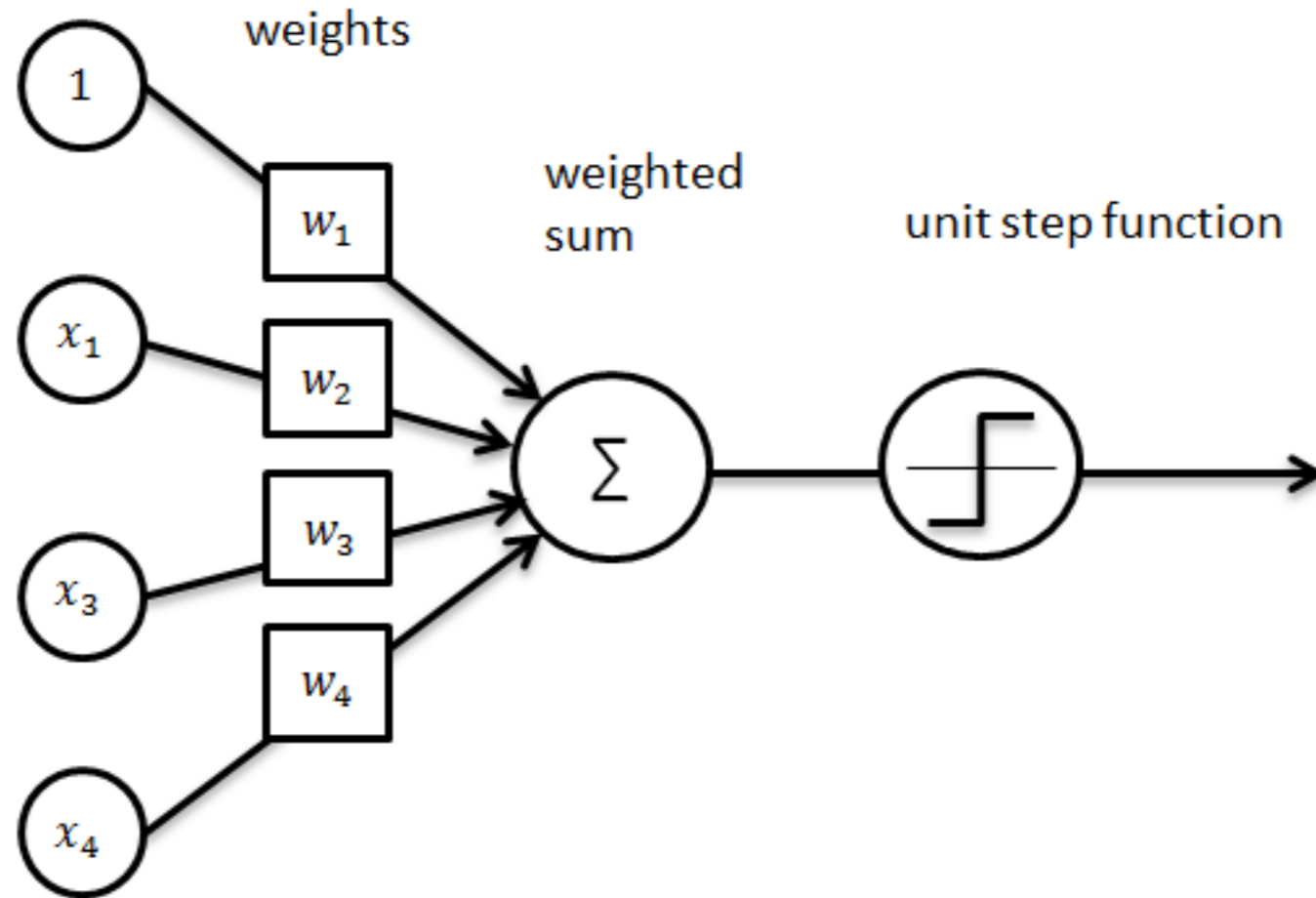
Neural Network

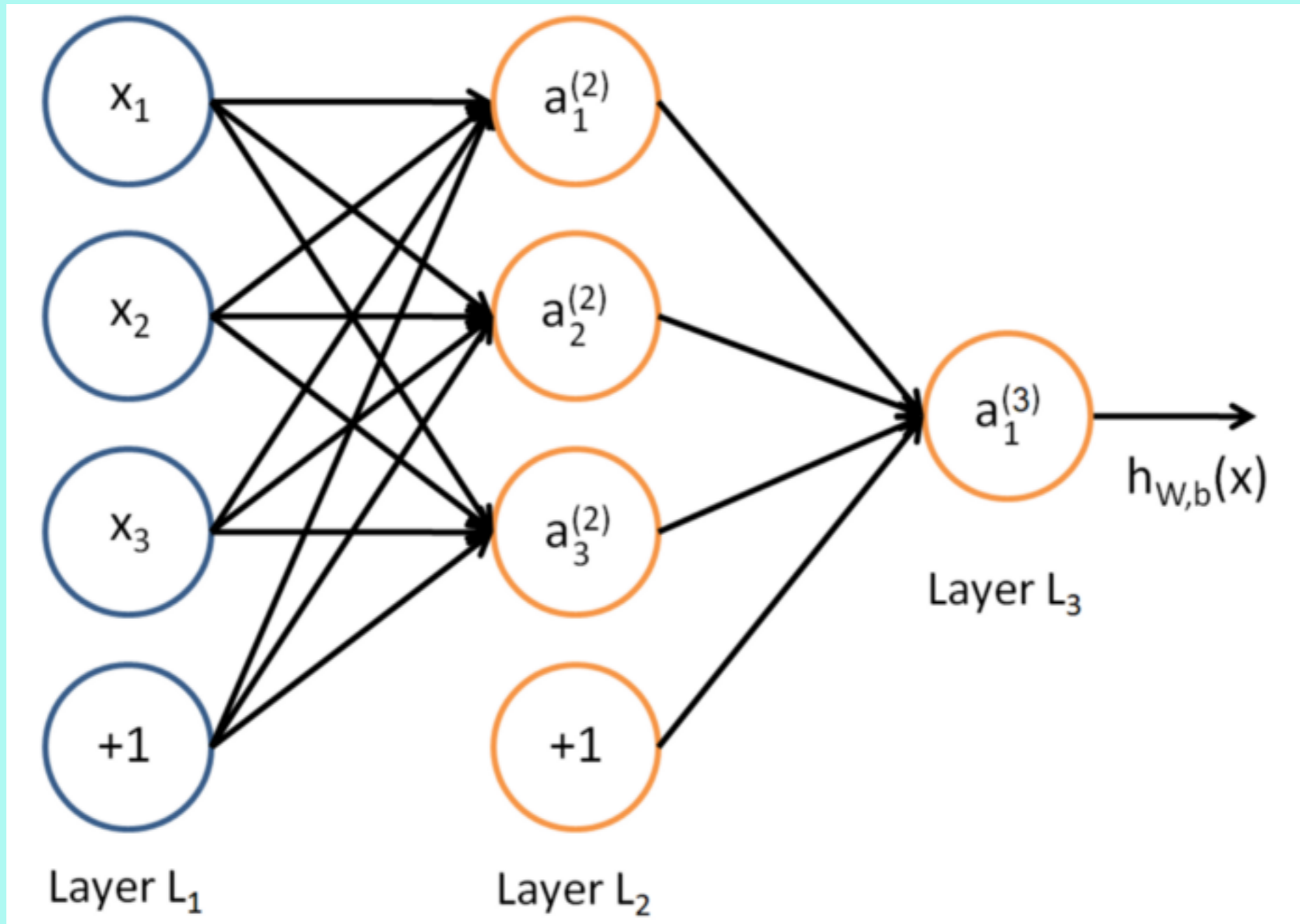
... is a computing system consisting of a number of simple but highly interconnected nodes that are organized in layers.

The nodes process data in reaction to inputs (from outside or inside)



inputs





<https://www.youtube.com/watch?v=ujBiM9stPHU>

very very basic tutorial
on the calculation in a neural network