Warren S. McCulloch and Walter
Pitts published tried to understand
how the brain could produce highly
complex patterns by using many
basic cells that are connected
together.

I Warren S. McCulloch and Walter
I Pitts published tried to understand
I how the brain could produce highly
complex patterns by using many
basic cells that are connected
together.

## 

### 

Alan Turing predicted the impact of Machine Learning. Additionally, he crafted what has been dubbed The Turing Test.

### 

Frank Rosenblatt declared that he
 construct a system which works
 similar to the perceptual processes of
 a biological brain - The Perceptron.

I Warren S. McCulloch and Walter
I Pitts published tried to understand
I how the brain could produce highly
I complex patterns by using many
I basic cells that are connected
I together.

#### 

Henry J. Kelley published "Gradient Theory of Optimal Flight Paths". Many of his ideas were used to develop the basics of a continuous backpropagation model (aka the backward propagation of errors) used in training neural networks.

## 

# 

## 

### 

Alan Turing predicted the impact of Machine Learning. Additionally, he crafted what has been dubbed The Turing Test.

### 

Frank Rosenblatt declared that he construct a system which works similar to the perceptual processes of a biological brain - The Perceptron.

I Warren S. McCulloch and Walter
I Pitts published tried to understand
I how the brain could produce highly
complex patterns by using many
basic cells that are connected
together.

#### 1960

Henry J. Kelley published "Gradient Theory of Optimal Flight Paths". Many of his ideas were used to develop the basics of a continuous backpropagation model (aka the backward propagation of errors) used in training neural networks.

### 1943

# 1950

### 1960

## 1965

### 1950

**Alan Turing** predicted the impact of Machine Learning. Additionally, he crafted what has been dubbed The Turing Test.

### 1957

**Frank Rosenblatt** declared that he construct a system which works similar to the perceptual processes of a biological brain - The Perceptron.

#### 1965

Alexey Ivakhnenko and V. G. Lapa created the first working deep learning networks, applying what had been only theories and ideas up to that point.

**Ivakhnenko** developed a learning algorithm using deep feedforward multilayer perceptrons. For that reason alone, many consider Ivakhnenko the father of modern deep learning.

Warren S. McCulloch and Walter
 Pitts published tried to understand
 how the brain could produce highly
 complex patterns by using many
 basic cells that are connected
 together.

#### 1960

Henry J. Kelley published "Gradient Theory of Optimal Flight Paths". Many of his ideas were used to develop the basics of a continuous backpropagation model (aka the backward propagation of errors) used in training neural networks.

### 1970 - First Al Winter

Al was subject to critiques and financial setbacks. Al researchers had failed to appreciate the difficulty of the problems they faced.

Al was claimed to only be suitable for solving "toy" versions.

## 1943

## 1950

### 1960

# 1965

## 1970

### 1950

**Alan Turing** predicted the impact of Machine Learning. Additionally, he crafted what has been dubbed The Turing Test.

### 1957

**Frank Rosenblatt** declared that he construct a system which works similar to the perceptual processes of a biological brain - The Perceptron.

#### 1965

Alexey Ivakhnenko and V. G. Lapa created the first working deep learning networks, applying what had been only theories and ideas up to that point.

**Ivakhnenko** developed a learning algorithm using deep feedforward multilayer perceptrons. For that reason alone, many consider Ivakhnenko the father of modern deep learning.