Building a basic classification model

Video 7: Limitations of ANN
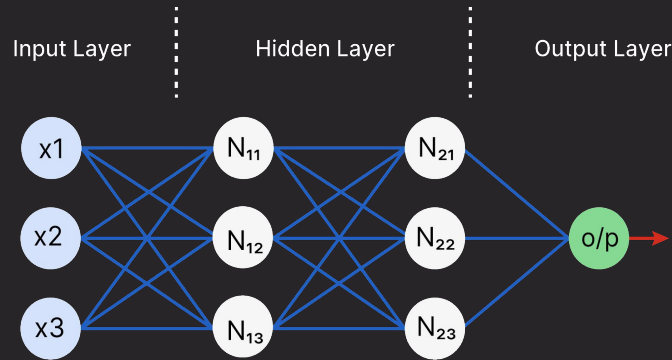
Analytics
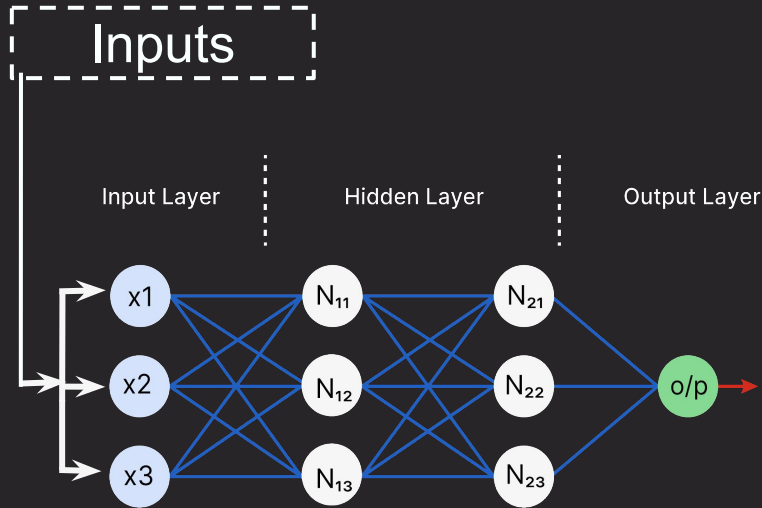Vidhya

ANN Architecture
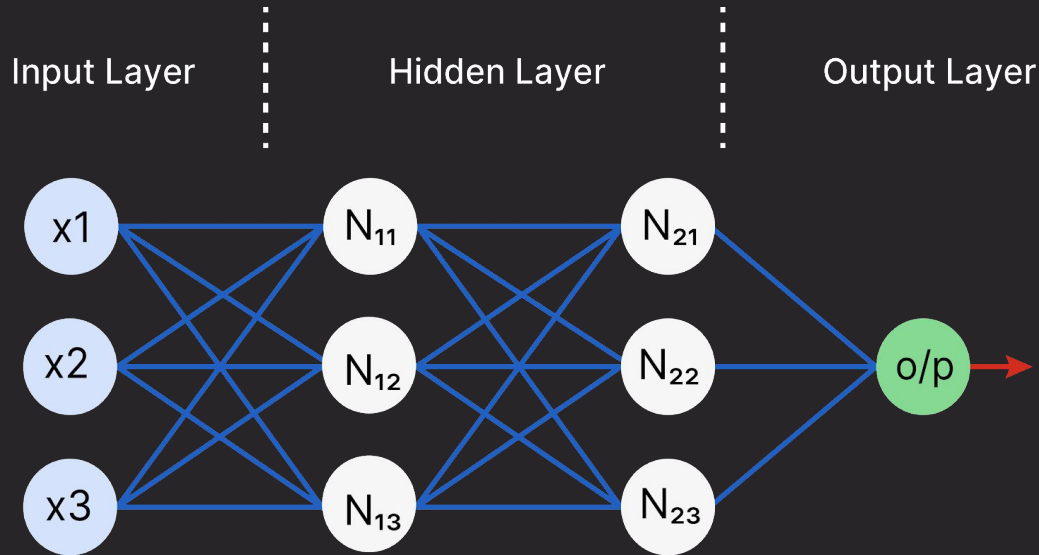
Limitations of ANN

1 Fixed Input Size

Input Layer   Hidden Layer   Output Layer

x1 N_{11} N_{21}

x2 N_{12} N_{22} o/p

x3 N_{13} N_{23}

Limitations of ANN

Inputs

Input Layer   Hidden Layer   Output Layer

x1 N_{11} N_{21}

x2 N_{12} N_{22} o/p

x3 N_{13} N_{23}

1   **Fixed Input Size**

Limitations of ANN

Inputs

Input Layer   Hidden Layer   Output Layer

x1   N₁₁   N₂₁

x2   N₁₂   N₂₂   o/p

x3   N₁₃   N₂₃

1 **Fixed Input Size**

choose	bound	storyline

insanely	huge	entire	far	long

Limitations of ANN

Inputs

Input Layer Hidden Layer Output Layer

x1 N_{11} N_{21}

x2 N_{12} N_{22} o/p

x3 N_{13} N_{23}

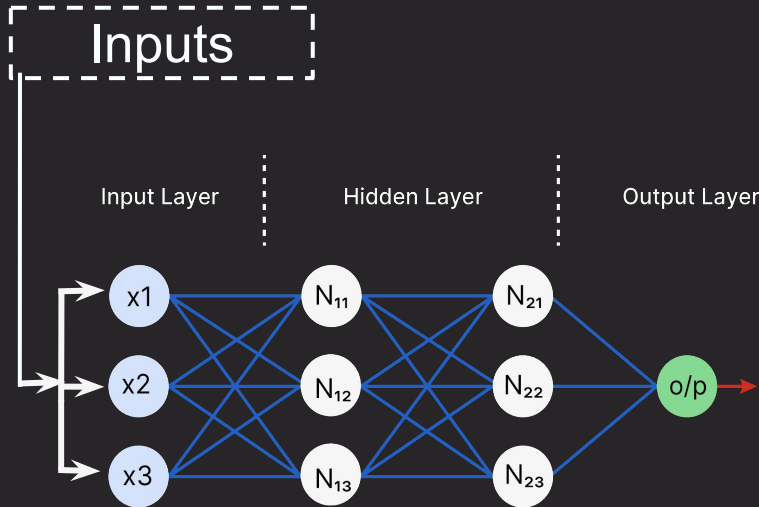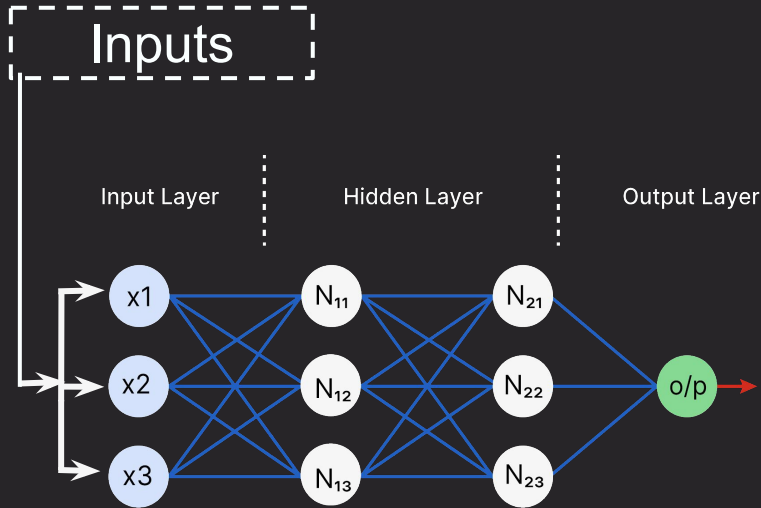**2 Fixed Output Size**

- Limiting its effectiveness in text generation task such as translation , summarization etc.

Limitations of ANN

Inputs

Input Layer   Hidden Layer   Output Layer

x1 N_{11} N_{21}

x2 N_{12} N_{22} o/p
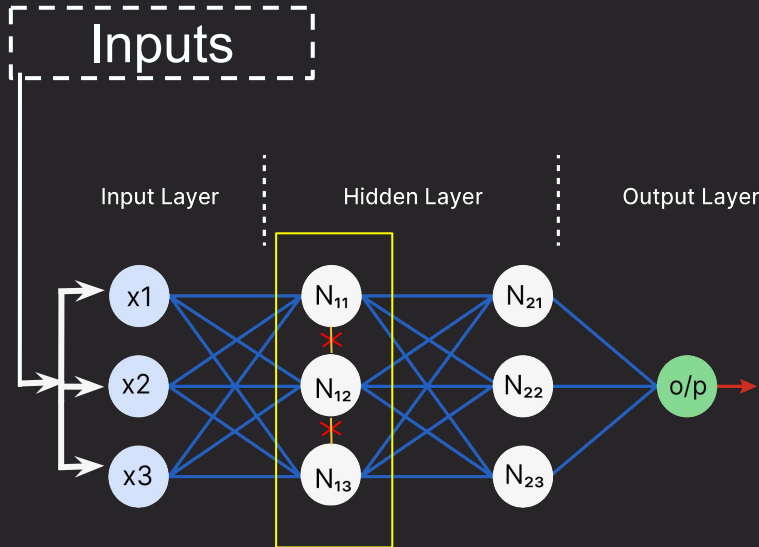
x3 N_{13} N_{23}

3 **Unable to process sequential data**

- Order and Relationship between inputs are not considered.
- Example : Understanding sentence and next word prediction.

Limitations of ANN

Inputs

Input Layer   Hidden Layer   Output Layer

x1   N₁₁   N₂₁

x2   N₁₂   N₂₂   o/p

x3   N₁₃   N₂₃

3   **Unable to process sequential data**

- Order and Relationship between inputs are not considered.
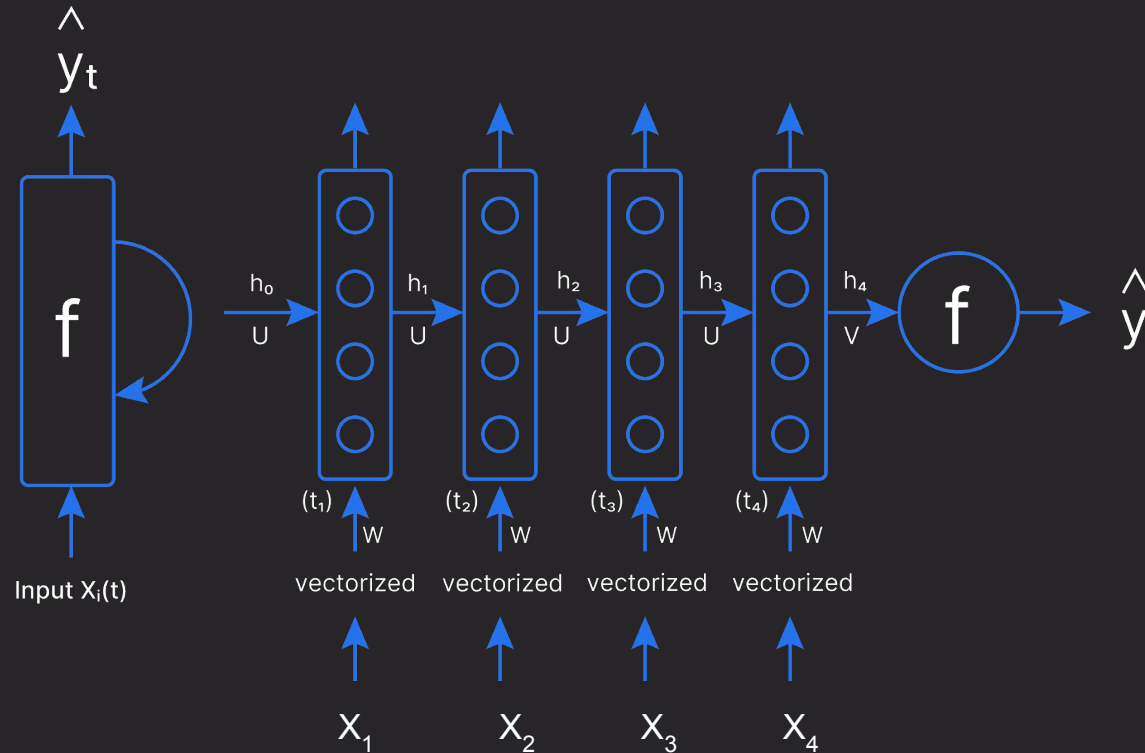- Example : Understanding sentence and next word prediction.

Limitations of ANN

Complete the following sentence.

"Life is full of _____."

Recurrent Neural Network

In air