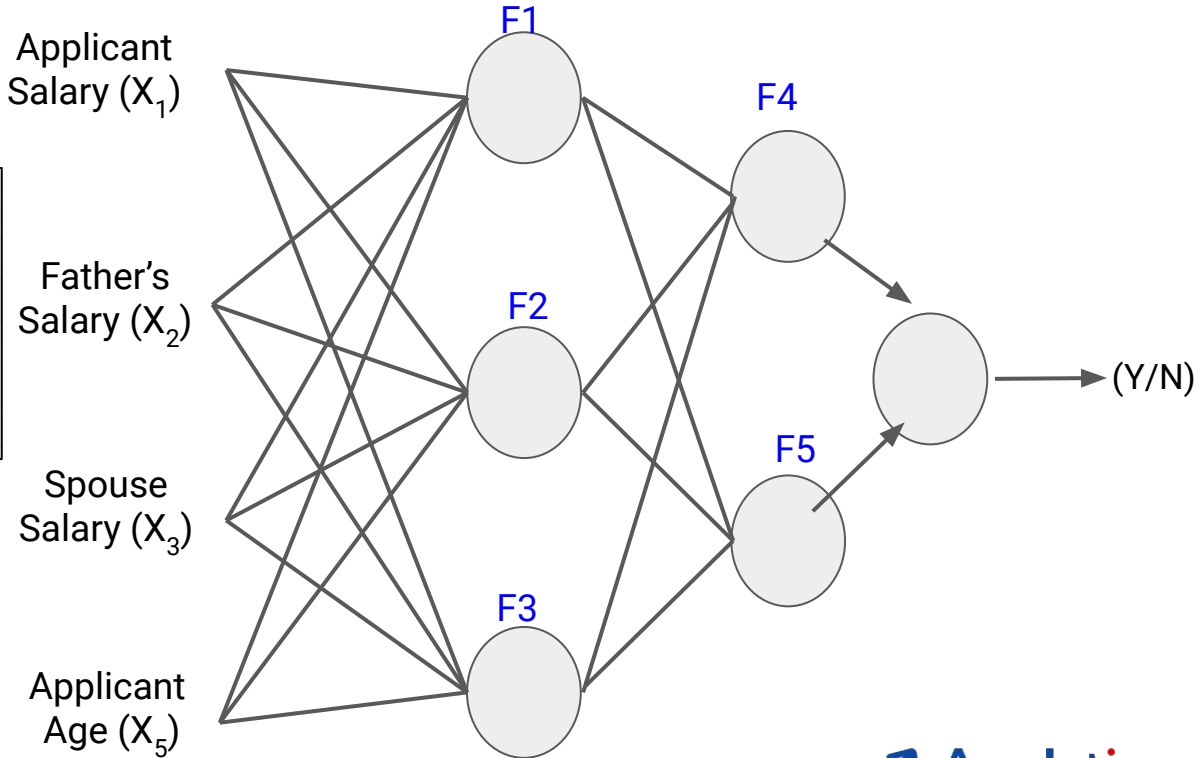


Problems with Multi Layer Perceptron

Multilayer Perceptron

Applicant Income	Applicant Age	Spouse Salary	Father's Income	Loan Approved?
50000	24	20000	117000	N
72000	32	62000	98000	Y
190000	45	92000	89000	Y
98000	36	117000	72000	N
122000	53	74000	92000	Y



Multilayer Perceptron

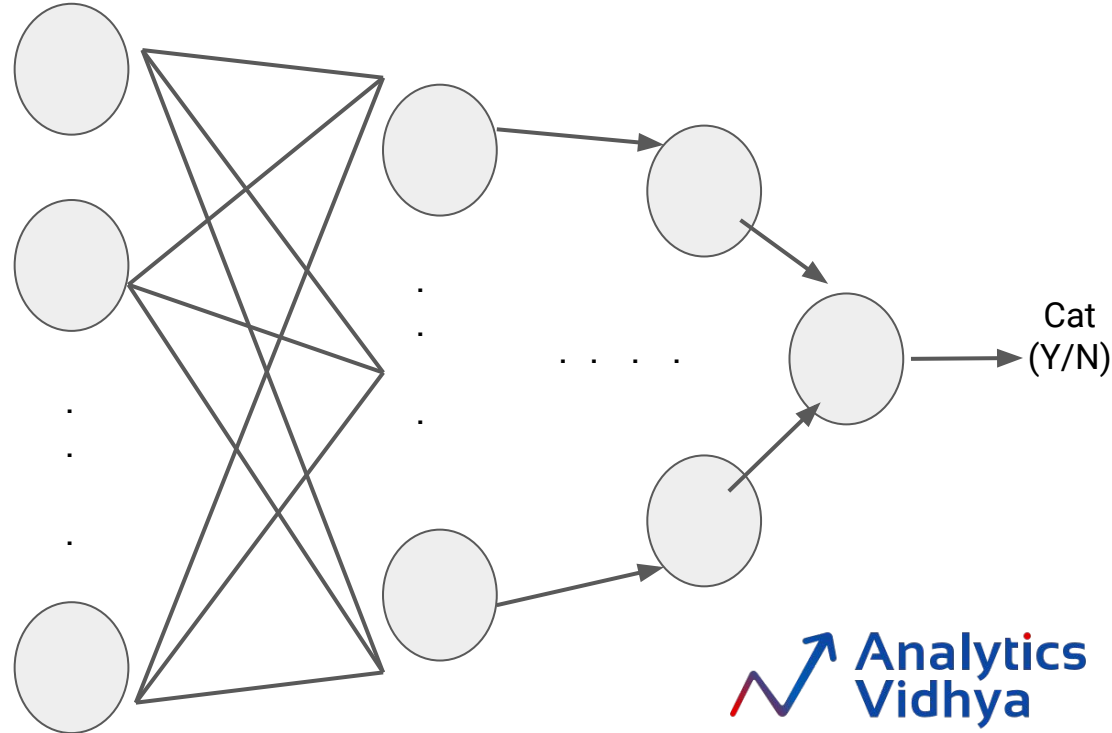
- Deep learning is used for unstructured data - images, text

Multilayer Perceptron

- Deep learning is used for unstructured data - images, text



Input Image - 5x7

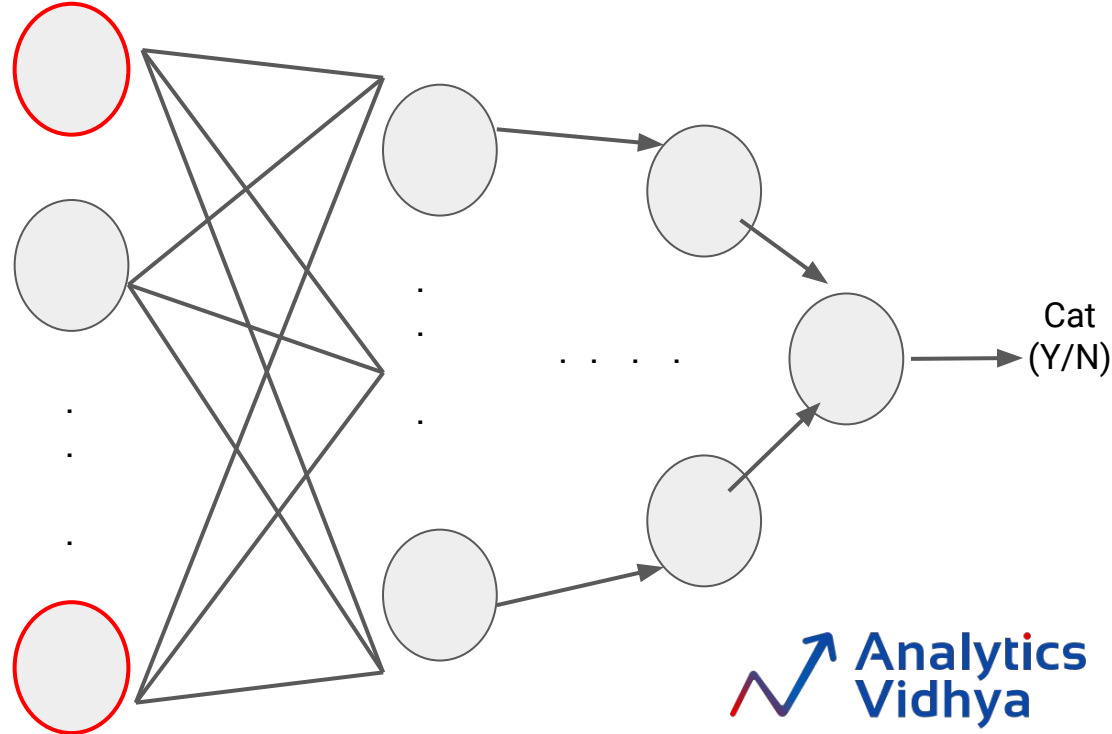


Multilayer Perceptron

- Deep learning is used for unstructured data - images, text



Input Image - 5x7

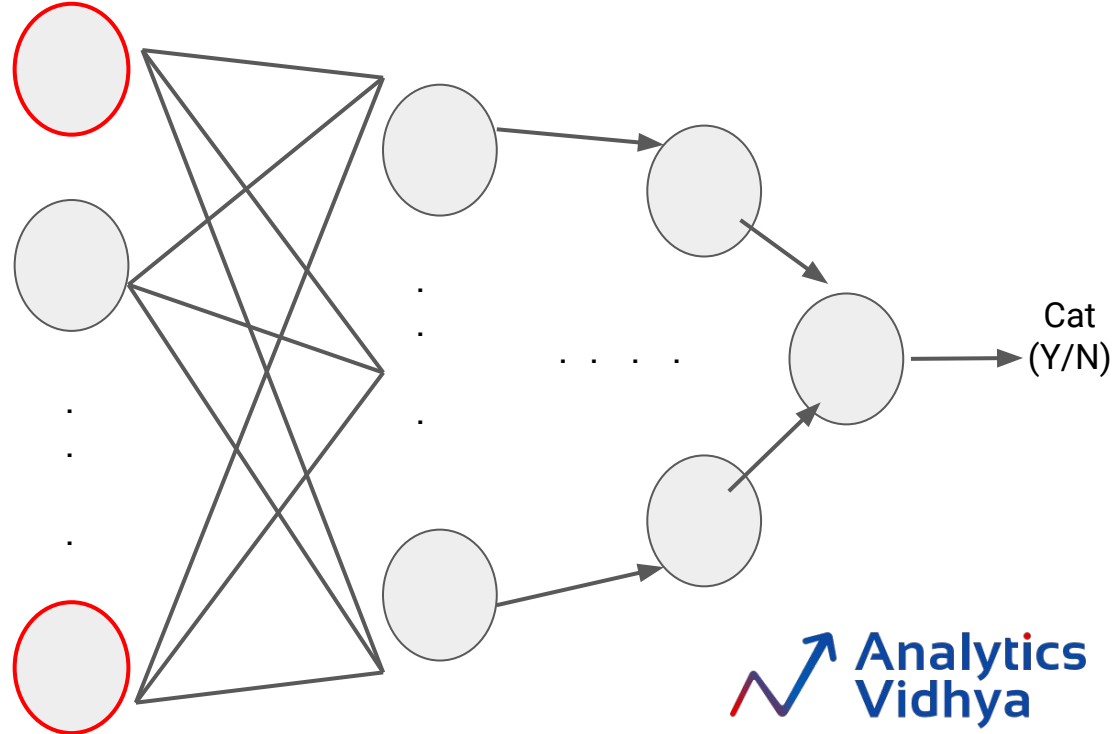


Multilayer Perceptron

- Deep learning is used for unstructured data - images, text



Input Image - 5x7

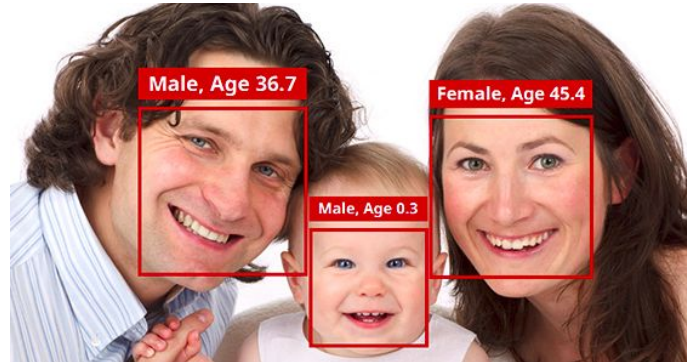


Drawbacks of Multilayer Perceptron

- Deep learning is used for unstructured data - images, text
- Spatial Orientation is important in images
- MLP does not consider the spatial orientation

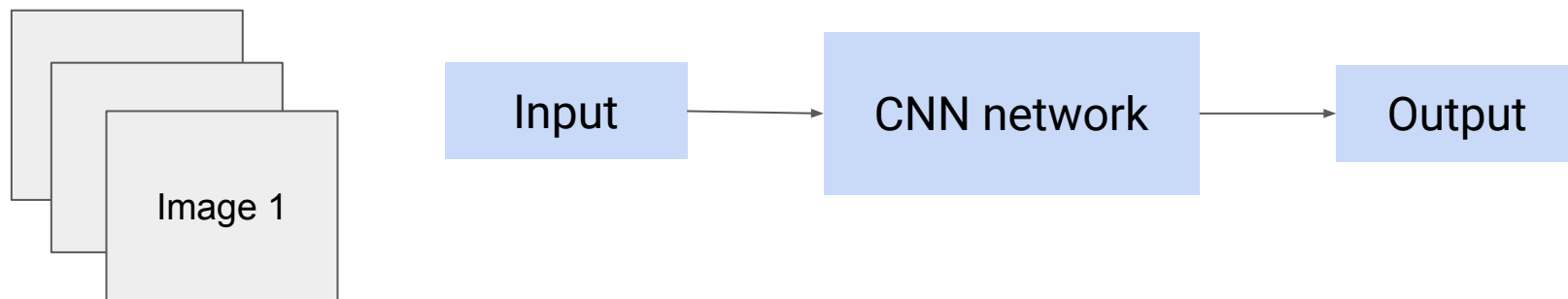
Drawbacks of Multilayer Perceptron

- Deep learning is used for unstructured data - images, text
- Spatial Orientation is important in images
- MLP does not consider the spatial orientation
- Convolutional Neural Networks are used for images



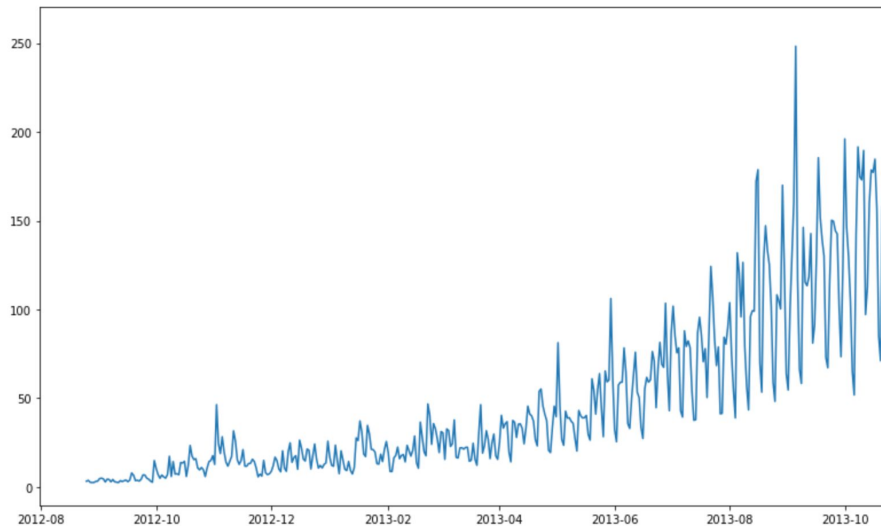
Convolutional Neural Network

- Convolutional Neural Networks are used for images



Drawbacks of Convolutional Neural Network

- Convolutional Neural Networks are used for images
- Time Series data has a sequential order which CNN cannot capture



Drawbacks of Convolutional Neural Network

- Convolutional Neural Networks are used for images
- Time Series data has a sequential order which CNN cannot capture
- Recurrent Neural Networks

Thank You