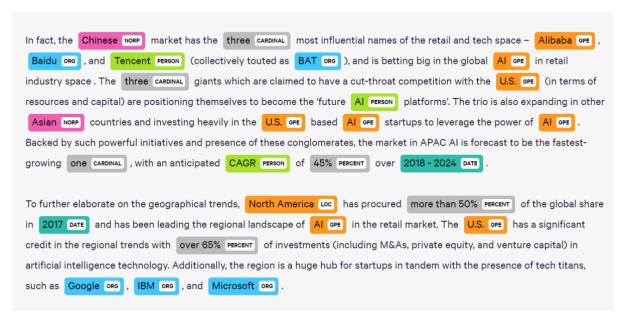
## Assignment 5

## **Named Entity Recognition**

NER is an information extraction technique to identify and classify named entities in text. These entities can be pre-defined and generic like location names, organizations, time and etc, or they can be very specific like the example with the resume. NER has a wide variety of use cases in the business. I think gmail is applying NER when you are writing an email and you mention a time in your email or attaching a file, gmail offers to set a calendar notification or remind you to attach the file in case you are sending the email without an attachment. Other applications of NER include: extracting important named entities from legal, financial, and medical documents, classifying content for news providers, improving the search algorithms, and etc.



## Task -

Task 1- Create a neural network with 4 input node, 3 hidden node, 4 output nodes. Train it and test it from scratch without using any deep learning library. Create function for forward pass and backword pass using Jacobian matrix.

Task 2 – In second task you are supposed to create a named entity recognizer for the given dataset using window based neural network.