Named Entity Recognition (NER)

About the Module

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❏ Importance of Named Entities

❏ Named Entity Recognition

❏ Named Entity Extraction

❏ Named Entity Classification

Named Entities

- Entities : common things, generally belongs to noun families

- Example - The president will meet the chairmen of the company in the capital city

  >> entities : "The president", "chairmen", "company", "capital city"

- Entities having a proper name, belongs to the Proper Noun families

- Example - "Donald Trump will meet the chairman of Google in New York City"

  >> named entities : "Donald Trump", "Google", "New York City"

Importance of Named Entities

- Represents important information present in the text objects

- Examples: Analysis of historical news text data

  - Which companies got acquired ?

  - Which cities have witnessed earthquakes ?

  - Names of the people who were arrested for crime ?

- The task of NER can be extended to other categories / domains
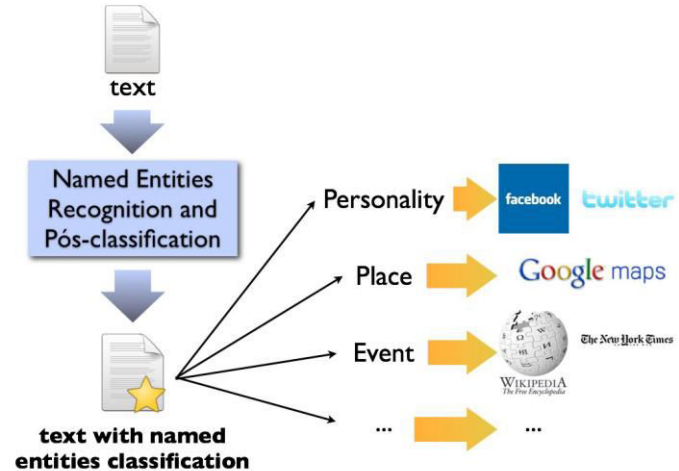
Named Entity Recognition

- Process of finding named entities from a given text

- Two steps :

    - Named Entity Extraction

    - Named Entity Classification

Named Entity Extraction

- Noun Phrases : groups of continuous proper nouns or proper nouns connected by prepositions

- Phrases of a sentence having direct subject or object relationships with the root

- Show a tree image having direct object and subject

- Part of speech tag : NNP family

Named Entity Classification

- Assigning the category of the named entity into one o

- Name of a Person, Name of a Company, Name of a lo

- Dictionary Based Approach

- Grammar Based Rules

text

Named Entities
Recognition and
Pós-classification

text with named
entities classification

Personality

Place

Event

...

Analytics Vidhya
Learn everything about analytics

Challenges

- Name Variation

  - Singh Yuvraj, Yuvraj, Kr Singh

- Multiple Categories

  - London : Name of a location, name of a city

  - Donald Trump Park : Name of a park (location), name of a person

- Non Capitalization