Learning Lab

StartVaardig

Motoric Skills Development

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SMARTIES
mini

T-SNE

What is t-SNE

- T-distributed stochastic neighbor embedding
- Visualizing high-dimensional data

What is it for

- Data exploration
- Data visualization
- Identifying non-linear connections

How does it work?

- Gaussian distribution
- Cauchy distribtution
- Kullback-Liebler divergence

Advantages

- Identify clusters
- Helps understand data
- Dimension reduction

Disadvantages

- Understanding parameters
- Choosing parameterization

Fig 1: t-SNE without fine tuning

Fig 2: t-SNE with fine tuning

Problems

Fig 3: normal t-SNE

Problems

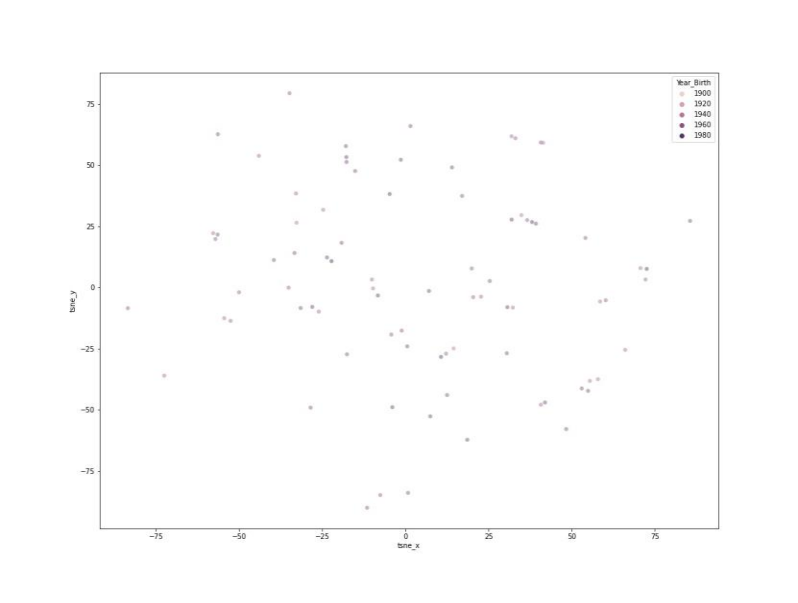

Fig 3: Perplexity: 2

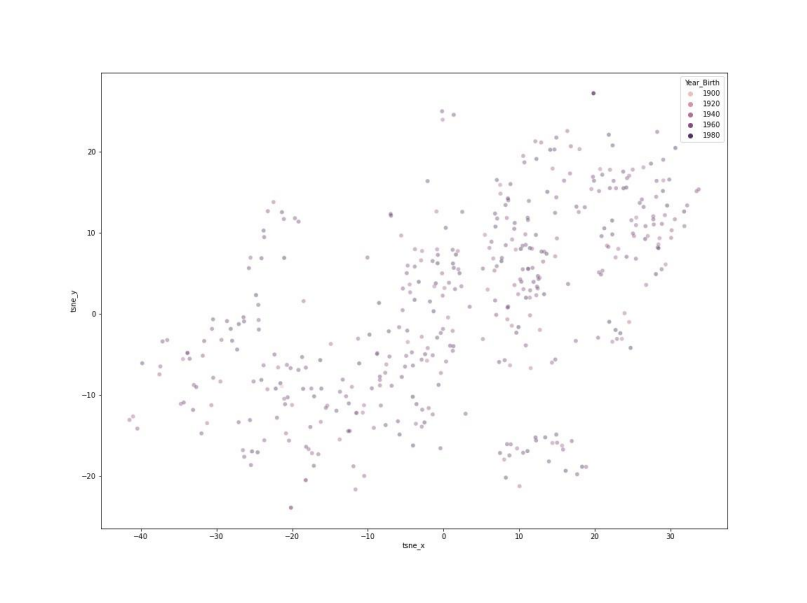

Fig 4: Perplexity: 100

Parameters

Needed steps

- Encode strings
- Scale data
- Unscale data

code EXAMPLE

your turn

Your task

Kahoot!

Code: on screen

Questions


thank you !
Questions

References

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