Dimensionality Reduction for Studying Diffuse Circumgalactic Medium by Peker Celik | 2021

Introduction

Large dimensioned data is not as efficient as dimensionally reduced data to use in machine learning models. This project solves and evaluates different dimensionality models and checks are they easy to use or not.

Project Goals

- Creating models so that easy to understand practical work.
- Cross-evaluating models.
- Documenting materials.
- Discovering and sharing new and easier ways to use these models

Implementation

Implementation of this project and will take approximately 10 weeks. We will develop different dimensionality reduction models with any Python-based library, evaluate our model and try to discover easier ways to do so. Then, we will document it and argue about the conclusions we find to make others gain a deep understanding of what we did and learned. As pre-requirement some data cleaning and visualizing will be necessary.

Timeline

Weekly feedback will be asked.

- Defining the problem, searching for existing solutions, and analysis of them: 1 week
- Exploratory data analysis, feature engineering, data cleaning: 1 week
- Develop models and evaluate: 8 weeks
- Documentation and final touches: 2 weeks

About me

Email: peker.celik@ozu.edu.tr
Timezone: GMT+3 Istanbul Turkey
Github: https://github.com/nebipeker
Linkedin: https://www.linkedin.com/in/pekercelik/
Kaggle: https://www.kaggle.com/nebipeker

I am Peker. I study Computer Science at Ozyegin University. I am currently a junior student there. I am planning my career in data and I am very determined to that. I currently work as a Jr. Data Scientist at a Startup. My two passions are entrepreneurship and artificial intelligence. I have completed a lot of Udemy courses, introduction to data science course at my college, Andrew NG's deep learning series. I have read 100+ academic papers and medium blog posts. I really like teaching. I am giving free python lectures for people who did not have the chance that I had. Here is the link. I really enjoy doing good for others. Since

now, I deployed classification models, recommendation engines, predictive models, and so on. I am planning to give 40+ hours per week to this project, also if it requires more, I am happy to give. I have participated in some competitions at Kaggle but sadly, no winning for now.