RYKOV ANDREI

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kaggle https://www.kaggle.com/glendawur

SKILLS

- Python Programming
- Scientific Programming
  - SciPy, NumPy, Pandas
- Machine Learning
  - scikit-learn
- Deep Learning
  - PyTorch,
  - Basics of TensorFlow
- Data Visualization
  - Matplotlib, Seaborn
  - Plotly, Dash
- Topological Data Analysis
  - GUDHI, TopologyLayer
- SQL (TransactSQL)
- Database and Data Warehouse design
- Neo4j basics
- Azure Machine Learning Platfrom
- PySpark basics

ACHIEVEMENTS

- Yandex Machine Learning student Competition 2021: 15th result

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LANGUAGES

English	C1
German	A1
Russian	Native

EDUCATION

MSc in Data Science and Artificial Intelligence

Eindhoven University of Technology (TU/e) 2021- 2023

Graduation thesis: Robust Deep Spectral Clustering
(Supervisor: Prof. S. Hess, Grade: 8)

Investigation of SOTA deep clustering methods, limitations study and a proposal of a novel deep spectral clustering method, Robust Spectral Map. Experimental studies has shown that proposed model obtained results comparable with closest competitors.

Relevant courses:

- Deep Learning - Building PyTorch models for one-hot characters classification, prediction of particles trajectory, anomaly detection using VAE on FashionMNIST.
- Machine Learning Engineering - building machine learning pipelines for various tasks
- Generative Models - coding and training of Bayesian Network model and VAE on MNIST.
- Big Data Management - writing PySpark scripts to compute multivariate correlations between stocks and weather time-series

GPA: 8/10

BSc in Business Informatics

Higher School Of Economics (HSE), **Moscow** 2017- 2021

Graduation thesis: Application of Anomalous Clustering Methods for Determination of the Number of Clusters
(Supervisor: Prof. B.Mirkin, Grade: 9)

Link to code

Comparative analysis of common and anomalous clustering based methods to determine the optimal number of clusters was made. As the result, it was shown that modified elbow index has the best precision among the indices with low computational time.

Relevant courses:

- Data Management - projecting database for cafe and building data warehouse and OLAP cube
- Data Analysis in Business - bank clients segmentation, sales prediction for multiple shops
- Multidimensional Data Analysis
- Econometrics

GPA: 9.09/10

WORK EXPERIENCE

Academic Internship

LIIS Engineering http://liis.su/ 07/2020

Internship in LIIS Engineering. As an intern, comparative analysis of various mobile applications for charging e-cars was conducted and comparative survey for prospective app was prepared.

Professional Course

Alfa Factory 4.0 https://alfabanklive.ru/alfafactory 09/2019 - 02/2020

Professional qualification course for system architects with practice of projecting bank processes using Pega BPM.

Project

Linio Space https://linio.space 10/2018 - 06/2020

As part of the project, JavaScript and Pug code for the UI of the website were written, adding a number of additional panels for the interactive map. In addition, several SQL procedures for the data processing and migration of graph information from RDBMS to graph database Neo4j were developed.