

# Nikita Kozodo

- ■ n.kozodoi@icloud.com
- https://kozodoi.me (project portfolio & ML blog)
- in https://linkedin.com/in/kozodoi
- https://github.com/kozodoi

#### Experience

04/2018 - present

Data Science Research Associate, Monedo / Humboldt University, Berlin.

- o developing solutions to mitigate the impact of sampling bias on ML models in credit scoring
- o investigating profit-fairness trade-off with fair ML algorithms
- o performing cost-driven feature selection with multi-objective evolutionary algorithms

07/2016 - 03/2018

Research Assistant, Max Planck Institute for Human Development, Berlin.

- o benchmarked managerial heuristics against ML algorithms in customer classification problems
- o analyzed factors affecting the predictive performance on marketing data sets

#### Education

04/2018 - present PhD in Information Systems, Machine Learning, Humboldt University, Berlin. Research on ML/DL applications for credit scoring. Teaching ML and supervising dissertations.

10/2015 - 12/2017 M.Sc. in Economics and Management Science, Humboldt University, Berlin, GPA: 1.30 (A). Focused on Machine Learning and Data Science. Double-degree program with HSE Moscow.

09/2010 - 06/2014

**B.Sc.** in Economics, Higher School of Economics, St. Petersburg, GPA: 1.31 (A). Focused on Econometrics and Statistics. Diploma with honors. Top-1 in the 4-year student rating.

#### Certificates

06/2021 SQL for Data Science, UC Davis. SQL for data extraction and manipulation

06/2020 Deep Learning Nanodegree, Udacity. Building CNNs and RNNs in PyTorch [certificate]

05/2020 Machine Learning Engineer Nanodegree, Udacity. Deploying ML and DL models in AWS [certificate]

### Technical Stack

Tools Python, R, SQL (interm)

**☐** VSCode, Atom, Jupyter

AWS Sagemaker, Neptune

Sit, Trello

**Packages** 

pandas, numpy, scipy

♣ scikit-learn, xgboost, lightgbm, hyperopt

imm, opency, albumentations

**IIII** matplotlib, seaborn transformers

image classification, object detection, image captioning

sentiment analysis, text classification

Applications

聞 classification, regression, clustering, dimensionality reduction

# Selected ML Competitions

pytorch, tensorflow (interm)

06/2021 BMS Molecular Translation, top-5%. Image-to-text translation with CNN-LSTM encoder-decoder.

02/2021 Cassava Leaf Disease Classification, top-1%. Identifying plant diseases with CNNs and Transformers.

02/2019 Google Analytics Revenue Prediction, top-2%. Predicting customer spending with gradient boosting.

Kaggle Master. Top-1% in Competitions, Notebooks and Discussion. Profile: https://kozodoi.me/kaggle

#### Selected ML Publications

Fairness in credit scoring: Assessment, implementation and profit implications European Journal of Operational Research [doi.org/10.1016/j.ejor.2021.06.023] [GitHub]

Shallow self-learning for reject inference in credit scoring

European Conference on ML and PKDD [doi.org/10.1007/978-3-030-46133-1] [Slides]

A multi-objective approach for profit-driven feature selection in credit scoring Decision Support Systems [doi.org/10.1016/j.dss.2019.03.011]

## Further Skills

Languages English (C2), German (C1), Russian (native speaker)

Key skills

Passionate about machine learning and data

- o Inspired by using ML to improve decision-making
- Strong motivation to learn and improve
- Excellent presentation skills