# Nikita Kozodoi, Ph.D.

ML scientist working on the frontier of research & business. With PhD in ML, certified AWS expertise, practical experience in diverse ML areas and strong communication skills, I am passionate about using AI to solve challenging business problems. ♦ kozodoi.me (portfolio & ML blog) in linkedin.com/in/kozodoi github.com/kozodoi ☑ n.kozodoi@icloud.com

# Experience

07/2022 - present **Applied ML Scientist**, *Amazon Web Services*, Berlin.

- o developing cutting-edge ML/DL solutions to solve diverse business problems across industries
- o interacting with large-scale customers to identify and implement high-value ML use cases
- o leveraging AWS infrastructure to design, build and deploy custom ML solutions

04/2022 - 06/2022 **Project-Based Data Scientist**, *Simply Rational*, Berlin, freelance.

- o identified customer segments and prototyped segment prediction models from incomplete data
- o analyzed A/B tests results to determine treatments improving customer repayment by up to 6%

04/2018 - 03/2022 Data Science Research Associate, Monedo / Humboldt University, Berlin.

- developed sample bias mitigation algorithms to improve model profitability by up to 3%
- o reduced data acquisition costs by up to 25% using multi-objective feature selection methods

#### Education

04/2018 - 03/2022 Ph.D. in Machine Learning, Information Systems, Humboldt University, Berlin.

Published 5 papers on ML for credit risk analytics with over 130 total citations. Degree with Honors.

10/2015 - 12/2017 M.Sc. in Economics, Quantitative Methods, Humboldt University, Berlin, GPA: 1.30 (A).

Focused on Data Science and Predictive Analytics. Thesis topic: ML for box office forecasting.

09/2010 - 06/2014 B.Sc. in Economics, Higher School of Economics, Moscow, GPA: 1.31 (A).

Focused on Statistics and Econometrics. Top-1 in the 4-year student ranking. Diploma with Honors.

# Selected Certifications

01/2023 AWS Certified Solutions Architect Associate. Showed comprehensive understanding of AWS services.

01/2022 AWS Certified ML Specialty. Demonstrated ability to build, train, tune and deploy ML models on AWS.

05/2020 Udacity ML Engineer Nanodegree. Learned to build and deploy ML models using Amazon SageMaker.

Further AWS certifications and course completions are available on my website. [Certificates]

# Selected ML Projects

09/2018 - present Kaggle Master. Won 18 competition medals. Reached top-1% of the global user ranking. [Projects]

05/2021 - 08/2021 **Text Readability Prediction.** Developed a PyTorch pipeline for text complexity prediction with transformers. Deployed a web app for scoring custom texts. Placed top-9% in the Kaggle competition. [App] [GitHub]

09/2019 - 04/2021 Fairness: Package for Fair ML. Building and maintaining an R package with over 18k total downloads. Implemented calculation and visualization of fairness metrics. Wrote documentation. [Blog post] [GitHub]

Further ML projects and their summaries are available on my website. [Portfolio]

#### Selected ML Publications

06/2020 - present ML Blog. Publishing ML/DL tutorials and project overviews. Reached over 10k monthly views. [Blog]

11/2021 Fairness in credit scoring: Assessment, implementation and profit implications, EJOR. [Paper] [GitHub]

04/2020 Shallow self-learning for reject inference in credit scoring, ECML PKDD. [Paper] [Talk]

Further ML papers and talks are available on my website. [Publications]

### Technical Stack

Tools **//>** Python, R, SQL

**□** VSCode, Jupyter

AWS: SageMaker, EC2, S3, Lambda

4 Git, Trello

Packages EP Pandas, NumPy Strong PyTorch, TensorFlow A Scikit-learn, XGBoost, DGL Phuggingface, Timm

### Soft Skills

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

- o strong motivation to learn and be curious
- o attention to detail and scientific mindset
- o excellent communication skills [Public talks]
- o rich experience of working in team projects