# Nikita Kozodoi, PhD

Al scientist working at the frontier of research and business. PhD and 7+ years of applied AI/ML experience, currently focusing on Generative AI. Proven ability to design and build scalable, robust, end-to-end AI-powered solutions that drive business impact across industries. Strong public speaker with 25+ talks top tech summits, meetups, and academic conferences.

♦ kozodoi.me (personal AI blog)

in linkedin.com/in/kozodoi

github.com/kozodoi

☑ n.kozodoi@icloud.com

## Experience

09/2024 - present Senior Applied Scientist - Generative AI, Amazon Web Services, Berlin [Team].

- o building generative AI solutions to address diverse business problems across industries
- leveraging AWS to design, build, and deploy custom LLM- and ML-powered workflows
- o directly working with large-scale customers such as Nasdaq, Ryanair, and adidas
- 07/2022 08/2024 Applied Scientist Generative AI, Amazon Web Services, Berlin.
- 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 400 citations. Degree with Honors. [Thesis]

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. Degree with Honors.

## Selected Projects

10/2024 - present IDP with Amazon Bedrock: Open-source cloud solution for document processing at scale with GenAl.

Lead developer and owner of the open-source AWS CDK solution for Al-driven IDP [Blog post] [GitHub]

10/2024 - present **LLM Self-Reflection**: Open-source Python library for test-time LLM inference techniques.

One of the core developers of the library that implements self-reflection algorithms [GitHub]

09/2018 - 02/2022 Kaggle Master. Won 18 competition medals. Reached top-1% of the global user ranking. [Projects]

#### Selected Publications

06/2020 - present Al Blog. Publishing Al insights, Python tutorials, ML tips, and more. Reached 10k monthly views. [Blog]

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

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

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

### Selected Certifications

03/2025 AWS Certified ML Engineer Associate. Demonstrated ability to build and deploy ML solutions on AWS.

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

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]

#### Technical Stack

Tools **\rightarrow** Python, TypeScript, Docker \quad VSCode, Windsurf \textbf{\textitle} AWS, Terraform, CDK Sit. React

Libraries Pandas, Numpy, Streamlit PyTorch LangChain, Transformers, Strands LangChain, Transformers, Strands

#### 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 with ambiguous problems