curriculum vitæ of

Yaroslav Zharov

Born 15.11.1990, Moscow, Russia

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Education

2010 – 2015	**Dipl. Engineer** in applied math	Moscow Engineering Physics Institute

In particular, high achievements in Control Systems, DSP, CV, and Programming.

2021 – 2025	**PhD** Computer Science	Heidelberg University

Magna Cum Laude. Self-supervised Deep Learning for CT.

Skills

Development: Linux, Python, Git, PyTorch, NumPy, HuggingFace Transformers.
Research: LaTeX, Machine Learning, Deep Learning, Data Analysis, Computer Vision, Statistics, Scientific Writing & Public Speaking, Research Leadership.
Russian–native, English–advanced, German–upper-intermediate.

Work Experience

2023 – now — Senior Researcher, Research Team Lead — JetBrains

Formed a research team from a bunch of researchers and grew the team's ability to publish. Launched several education initiatives at the company level. Our team established the base culture of working with AI agents in the company. During the first year, the four papers were accepted in different top-level ML and SE venues.

2023 — Visiting Researcher — Rexplorer

Converted the business request to an ML task. Proposed and implemented labeling, training, and inference pipelines for rooftop solar panels segmentation.

2019 – 2023 — Researcher, PhD student — Karlsruhe Institut of Technology, IPS

Self-supervised deep machine learning for X-ray tomography data: self-supervised pre-training, unsupervised localization, lost data inpainting, denoizing.
Developing a system for the full cycle of supervised machine learning, from training to metainformation extraction.

2017 – 2019 — Researcher — Sberbank AI Lab.

Research on neural networks interpretation. Implementation of approaches from recent papers, checking proposed extensions, and research on applicability to the banking area. (two patents issued)
Research on different RF implementations for credit scoring tasks. Overview of applicable interpretation methods.
Time series analysis for security incident detection.
Statistics analysis of internal employees polling, consultations for employees out of the area about statistical analysis, and base work with statistical hypothesis testing.

2016 – 2017 — Analyst — Sberbank Technology ML Lab.

Data and feature extraction from raw text. Named entity recognition.
Text classification/clusterization with (python DS stack, BigARTM, VowpalWabbit).
Time series analysis & prediction with statistical methods (Shewhart CC, CuSum) and modified FB-Prophet library.

| 2016 – 2017 | Analyst-developer | Kaspersky lab R&D |

Development of a system for user statistics preparation, warehousing and analysis with MSSQL and python DS stack.
Prototyping system to detect potentially unwanted installations on user statistics.
Internal analysis tools development.
Database of vulnerabilities development and support.
C++ satellite development (data decoding and parsing).

| 2013 – 2015 | Trainee | Institute of Control Sciences, Russian Academy of Sciences |

Research on wavelet-neural networks, wavenets and initialization of multilayer neural networks.
Research on modification of convolutional neural network initialization and activation function.
Publication "Usage of wavenets of arbitrary dimensionality for objects modelling" IMMOD-2015.
Publication "Different initialization methods of wavenets comparison" MN-MEPhI-2015.

References

Pavel Shvechikov	✉ shvechikov.p@gmail.com	Lecturer at YSDA, HSE; Senior Engineer at Samsung
Dmitry Kataev	✉ dekataev@gmail.com	Researcher at Institute of Control Sciences, RAS
Nikita Vostretsov	✉ whalebot.helmsman@gmail.com	Data Scientist at Scrapinghub