Anton Maksimov

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AI/ML Engineer with a strong analytical background — curious, fast-learning, and accountable

5 years taking ML systems from scratch to production: classification at scale, training pipelines, research

Work Experience

02/2026 – now | **Independent projects and learning** — Telegram bots, association website, privacy tools — Zurich
– Bots in use by RuPR community (>1500 members): 1. RAG/LLM Q&A bot over chat history, github
2. Llamaindex/Langgraph/LLM bot to update FAQ website based on chat, github
– Book/film-club interactive voting bot with LLM-suggestions, used in chats with >250 members, github

11/2024 – 01/2026 | **(Senior) AI/Software Engineer, 90%** — *Intellis AG*, Zug (AI trader, FX and crypto)
Led ML & research team of the AI–trader (Python, PyTorch, MLflow, Docker, Dagster)
– Rebuilt train/back-test pipeline from scratch, replacing the previous stack with tracking, QC, and CI/CD
– Set the team's research-to-production process: goals, plans, and reviews

11/2021 – 08/2024 | **Machine Learning/Software Engineer, 100%** — *xorlab AG, Zurich* (startup, cybersec, 200K users)
Email ML–classification from scratch; f1 > 95% vs. previous manual rules (Python + Java)
– Created ETL streamed data pipelines (cleaning, enhancement, balancing), MLOps (AzureML)
– Optimized Machine Learning models (Optuna), improved reliability & explainability (LIME, SHAP)
– Developed infrastructure (CI/CD – Jenkins+Gradle+Docker, monitoring – Prometheus, API – Flask)
– Conducted research on Machine Learning techniques, phishing/spam attacks, anomaly detection, NLP

03/2021 – 08/2021 | **Data Science Research Assistant, 35%** — *ETH Zurich*
Big data processing for economics (Python, GIS)
– Automated alignment of Terabytes of nightlight data with maps to get economic activity during Covid

Education

09/2019 – 09/2021 | **MSc ETH Zurich in Computational Science and Engineering**
GPA **5.55/6.00**, Robotics specialization, **136 ECTS** in one year (60 required)
Thesis "Hyperbolic Heterogeneous Graph Neural Nets" – grade 5.5/6.0
– Graph ML with **eBay** on transaction fraud detection; transformers with mixed node and edge types
Relevant courses
Advanced Machine Learning, Deep Learning, Computer Vision, Data Modeling and Databases

09/2015 – 08/2019 | **BSc in Applied Mathematics and Physics**, *Moscow Institute of Physics & Technology* (top–3 in Russia)
GPA **4.96/5.0**
Thesis "Pipeline for search of off-target ligand connections" (databases + bioinformatics)
Biophysics specialization, courses: Bioinformatics, Biostatistics, Physics, Algorithms, System Design

Awards

2019 – 2021 | **ETH Scholarship** *(acceptance rate < 5%)* - providing covering of all the expenses during the whole study

2015 – 2019 | **Merit-based stipends** *(acceptance rate < 5%)* - from alumni and state, MIPT

2012 – 2015 | **Awardee** of international (ranked up to top-10) and national contests in math and physics (up to top-5)

Continuing Education

10/2026 | **"RAG and Agentic AI Professional Certificate"**, (certificate) *IBM–Coursera*

08/2026 | **"AI Agents" and "Context Engineering" courses**, *Hugging Face*

07/2026 | **"NeuroAI course"** (git, certificate), *Neuromatch Academy*

10/2024 | **"Introduction to Generative AI for Software Development"** (certificate), *DeepLearning.AI*

07/2024 | **"ML with Apache Spark"**, **"Intro to Big Data with Spark and Hadoop"**, *IBM–Coursera*

Languages

English — C2, German — C1 (+ understand Swiss German), French — B1, Russian — native

Hobbies



Philosophy, arts, logic puzzles, maths, science



Studying organ part-time. Choir singing and touring. Playing accordion (solo, group), piano, violin & organ



Economics and social sciences. Communities & networks

Leadership & Community

Since 2025	**Founder and president** of RuKAV, Russian-speaking cultural & academic association in Zurich
Since 2022	**Main admin & reviver** of RuPR – largest Russian-speaking group in Zurich & around (>1500 members)
Since 2022	**IT- and Webmaster** of the Zurich students' musical community Musikplattform (>1400 members)
2017 – 2024	**Main admin** in the group "MIPT Internships abroad" (> 8000 members), help students with documents
2015 – 2022	**Judge** at the national physics olympiads and **tutor** of mathematics and physics

Research Programs

03/2020 – 10/2020	**Semester Project**, *ETH Zurich* — **"Hierarchical Variational Inference for Federated Learning"** – Coded hierarchical Bayesian Neural Net recognizing digits 3% better than the dense net (TensorFlow)
04/2020 – 09/2020	**Seminar in Robotics for CSE** — *Sevensense Robotics AG and ASL Lab, ETH Zurich* **"GPU–based image feature matching"** (Computer Vision, CUDA-numba on Python) – Coded on GPU and analyzed brute–force and hash image matching, which were ≈ 80x faster than CPU
11/2019 – 01/2020	**Team projects for courses "Deep Learning" and "Physically-based simulations"**, *ETH Zurich*: **"Deep Learning-based Recommendation Systems"** – grade 5.44/6.0 (TensorFlow on network) **"Waterboat"** – grade 6.0/6.0 (low–level C++ optimizations for Computer Graphics)
07/2018 – 08/2018	**Intern at EPFL Summer Research Program** (*acc. rate* ∼ 5%; Computer Vision + Java + biology) **"Assessment, Optimization and Automatization of Super-Resolution Microscopy Reconstruction"**
07/2017 – 09/2017	**Intern at ETHZ Amgen Scholars Program** (*acc. rate* ∼ 5%; Computer Vision + Python + biology) **"Big microscopic data compression"** – 3D-image compression; presented poster in Cambridge, UK

Skills Stack

Advanced:

Machine Learning & Data Science: Deep Learning, Computer Vision, NLP, LLM, AI-agents (LangChain, LangGraph, LlamaIndex), Generative AI, TensorFlow, PyTorch, sklearn, spacy, PyG/DGL, Explainability (SHAP, LIME)

Data Engineering: SQL, NoSQL, Dagster, Spark and PySpark

MLOps: AzureML, MLFlow

Software Engineering: Python (*SciPy, Numba, Flask*), Java and Scala, C++, REST, C, R

CI/CD: Docker, Jenkins, Gradle, Bash, Linux, GIT

Methodology: Agile, Scrum

Mathematics: Computational Math, Statistics, Stochasticity, Graph and Game Theories, Calculus

Familiar:

Parallel programming: GPU, CUDA, MPI, OpenMP

Cloud Computing: Azure, GCP

DevOps: Kubernetes, Terraform