Imron Yuldashev

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M.Sc. Mathematics student with research background in optimization, probability and analysis. Building Python ML systems focused on LLM/RAG evaluation, reproducible experiments, data pipelines, testing and local inference workflows.

EDUCATION

University of Göttingen Göttingen, Germany
M.Sc. Mathematics *Expected 2026*

- Advanced coursework: Probabilistic Machine Learning, Differential Geometry, Algebraic Topology.
- Strong foundation in probability, optimization, linear algebra and mathematical reasoning.

Nazarbayev University Astana, Kazakhstan
B.Sc. Mathematics *2020 – 2024*

- Focus: algebra, Lie groups, representation theory and functional analysis.

TECHNICAL SKILLS

Programming	Python, SQL, Bash/Linux, LaTeX; working knowledge of C++ fundamentals
ML/Data	PyTorch, NumPy, SciPy, Pandas, scikit-learn, Hugging Face, LangChain, FAISS, Ollama, vector search
Systems	Git, Docker, FastAPI, pytest, REST APIs, modular design, experiment tracking, reproducible pipelines
Mathematics	Probability, optimization, linear algebra, functional analysis, PDE, spectral theory, numerical methods
Languages	English fluent; Russian native

SELECTED PROJECTS

LLM Evaluation Harness for RAG and QA Systems *Python, Hugging Face, FastAPI, pytest, MLflow*

- Built a modular evaluation pipeline for comparing LLM/RAG outputs across datasets, prompts and retrieval configurations.
- Implemented scoring modules for semantic matching, retrieval recall@k, latency, token usage and failure-mode tagging.
- Stored experiment runs with reproducible configs and exposed results through a FastAPI service with typed schemas.
- Added pytest coverage for evaluators, dataset loaders and API endpoints.

Local RAG Research Assistant *Python, LangChain, FAISS, Ollama, Llama 3*

- Built a fully local Retrieval-Augmented Generation pipeline for analyzing scientific papers without sending documents to external APIs.
- Engineered FAISS semantic search with Hugging Face embeddings; tuned chunking, retrieval depth and context assembly.
- Added scripts to compare retrieval quality, citation coverage and unsupported-answer rates across embeddings and prompts.

Experiment Pipeline for Time-Series Model Research *Python, Pandas, PyTorch, Docker*

- Implemented a workflow for ingesting noisy tabular/time-series data, creating splits and running reproducible model experiments.
- Wrote reusable data loaders, transforms, baselines and experiment summaries for fast comparison of results.
- Containerized the workflow with Docker to make experiments easier to reproduce across environments.

RESEARCH EXPERIENCE

Nazarbayev University Astana, Kazakhstan
Research Assistant, Advisor: Prof. Durvudkhan Suragan *Apr 2023 – Aug 2024*

- Researched analysis on non-commutative Lie groups, focusing on spectral properties of hypoelliptic operators.
- Investigated Hardy-type inequalities and best constants using variational arguments and optimization-style reasoning.
- Translated ambiguous mathematical questions into precise assumptions, claims and reproducible written arguments.

Nazarbayev University Astana, Kazakhstan
Undergraduate Researcher, Advisor: Prof. Manat Mustafa *Aug 2022 – Mar 2023*

- Studied matrix groups, Lie algebras and representation theory.
- Presented seminar solutions and conducted a literature review on algebraic structures of classical matrix groups.

PROFESSIONAL EXPERIENCE

Hillclimb Remote
Mathematical Content and Algorithmic Problem Consultant *Nov 2024 – Jan 2026*

- Designed high-level algorithmic and mathematical problems, emphasizing correctness, edge cases and solution clarity.
- Reviewed solutions for logical consistency and computational complexity.
- Communicated concise implementation-ready feedback for problem statements and official solutions.

ADDITIONAL

Competitive chess: peak online rating Bullet 2200, Blitz 2000.
Interests: LLM evaluation, optimization, quantitative research, machine learning systems.