




# Alexander Buyantuev

Saint Petersburg, Russia | alexbuyan.dev@gmail.com | +79112927153 |  telegram |  linkedin |  github

## Education

---

**HSE University**, BS in Applied Mathematics and Computer Science Sept 2020 – June 2024

- **Coursework:** Algorithms and Data Structures, Python (Web/Backend), C/C++, Machine Learning, Databases, Computer Networks, Calculus, Linear Algebra, Discrete Mathematics, Probability Theory, Math Statistics
- **Yandex School of Data Analysis:** Deep Learning, Natural Language Processing, Reinforcement Learning

**ITMO University**, MS in Artificial Intelligence Sept 2024 – Present

- **Research Interests:** Generative AI, AI Agents, Multi-Agent Reinforcement Learning, AI Security

## Experience

---

**ML Engineer (full-time)**, Huawei R&D Sept 2023 – Present

*AI Agents, LLM, RL*

- Currently developing AI agents and LLM workflows for different business scenarios.
- Implemented RL-based congestion control algorithms and integrated them into the communication protocol. Gained up to 10% performance upgrade compared to previous solutions.
- Developed a research framework to design FEC codes for different environment conditions using RL.

**ML Engineer (part-time)**, HSE University Dec 2024 – Present

*Laboratory for Theoretical Modeling in AI*

- Successfully released to end users the RAG-based workflow fine-tuned for Q&A of psychology-related questions
- Implemented LLM-based multi-agent workflow for complex data analysis tasks and deployed it in the production environment

**ML Project Manager (part-time)**, ITMO University Sept 2024 – Dec 2024

*AI Security Lab by Raft*

- Was part of the LLM Monitoring team behind the [HiveTrace](#) and helped the project gain popularity and first customers
- Contributed the Continuous Monitoring section to [OWASP GenAI Red Teaming Guide](#).
- Helped with translation of the OWASP Top 10 for LLM.

**Software Engineering Intern**, Huawei R&D Nov 2022 – Sept 2023

- Designed a tool to represent the LLVM IR module in C-like format that restores packages, classes and functions from Cangjie source code
- Tested the tool on 300+ open-source Cangjie projects
- Distributed the tool inside Cangjie Team for analysis of compiler's generated code by other developers

## Awards

---

**Concordia Contest**, Google DeepMind, Cooperative AI Dec 2024

In a team of 3 researchers *became finalists* of a competition organized by Google DeepMind and Cooperative AI Foundation during NeurIPS 2024 conference. Planning to publish a report on NeurIPS 2025.

## Technologies

---

**Programming Languages:** Python, C++

**AI frameworks:** PyTorch, Hugging Face Transformers, LangChain, LangGraph, AutoGen, crewAI, OpenAI Agents SDK, vLLM, MCP, scikit-learn, Pandas, NumPy

**Technologies:** git, uv, FastAPI, Docker, Pydantic

**Languages:** Russian, English (C1)

## Projects

---

### LLM Monitoring project

Sept 2024

- Integrated toxic classifier into LLM pipeline using LangChain
- Developed LangChain and REST API connectors using LangServe
- Configured project's observability using LangSmith
- Presented the project on AI Product Hackathon

### Telegram bot with integrated RAG pipeline

June 2024

- Developed RAG pipeline using Llama3:8b (self-hosted using Ollama) and sentence-transformers
- Created vector database on user's PDF files using Chroma
- Connected the pipeline with Telegram bot for easy interaction

### Movie rating prediction in Hadoop

Dec 2024

- Set up Hadoop and Spark to work with data
- Trained SGDRegressor to predict the movie rating based on tags

### Multilingual Embedding-based Machine Translation

Sept 2023

- Implemented embedding space mapping using linear regression and SVD
- Developed word-based translator from Ukrainian to Russian

### YouTube video comment generator

Apr 2022

- Trained GPT-2-Large on dataset of US videos and comments
- Developed an app to interact with the model using PyTube and Gradio

### PDF Editor with $\LaTeX$ support

Mar 2022 - June 2022

- Designed a converter of UI objects to PDF document to transfer project's data to PDF file
- Implemented rendering of  $\LaTeX$  equations to allow users to work with math formulas
- Developed a utility to download and save user's files
- Added font support in UI and PDF to empower the customization of documents

### Messenger with Trello boards

Jan 2021 - May 2021

- Hosted PostgreSQL database and developed API for interaction
- Added team boards support using Trello API