Aleksandr Popkov

Email: alr.popkov@gmail.com

7 YoE with machine learning projects that include forecasting, panel data analysis, computer vision, NLP. 3 YoE in biology research projects with computer vision application, 2 RScF research grants participation.

EXPERIENCE

Research Associate   **Feb 2024 – Present**

Zoological Institute of Russian Academy of Sciences, Saint Petersburg, Russia

- Lycaenidae butterflies ultraviolet image clustering with neural networks
- Lycaenidae butterflies image classification with deep neural networks

Sr. Data Scientist   **Aug 2022 – Present**

"GazpromNeft Regional Sales", LLC, Saint Petersburg, Russia

- LLM Q&A application development for corporate systems
- HR research interviews summarizing and classification
- Machine learning project planning, leading, and development

Research Laboratory Assistant   **Jun 2020 – Dec 2022**

Zoological Institute of Russian Academy of Sciences, Saint Petersburg, Russia

- Deep neural network applications for hard-to-distinguish true bug species (Heteroptera) identification
- Development of *Eurygaster* spp. pest classification service, phylogenetic tree analysis package "pyiwe"

Research Intern   **Sep 2020 – Dec 2020**

Saint Petersburg State University, Saint Petersburg, Russia

- Review of multi-armed bandit papers

Data Scientist   **Nov 2018 – Aug-2022**

"GazpromNeft Regional Sales", LLC, Saint Petersburg, Russia

- Edge-computing-based computer vision system development for petrol stations
- Development of forecasting models with probabilistic language Stan
- Treatment effect estimation in randomized trials
- Intern mentor. Topics: object detection with deep learning, speech processing

Analytics Intern   **Feb 2017 – Apr 2017**

"GazpromNeft Center", LLC, Saint Petersburg, Russia

- Statistical analysis and hypothesis testing
- Customer segmentation with machine learning

EDUCATION   **Saint Petersburg State University, Saint Petersburg, Russia**   **2020**
MSc in Business Informatics

Saint Petersburg State University, Saint Petersburg, Russia   **2018**
BSc in Economics, Mathematical and Statistical Methods

RESEARCH INTERESTS   Interpretable machine learning, natural language and speech processing, mathematical reasoning of language models, efficient machine learning, multimodal learning, deep learning in computer vision

SKILLS
- Programming: Python, Cython, C, bash
- Deep learning: PyTorch, TensorFlow 2, Keras
- Databases: relational (PGSQL, MSSQL, MySQL), vector (Milvus, ChromaDB)
- Experience in edge-computing including NVIDIA Jetson Nano, NX, AGX Xavier computing boards, eGPU setups
- Open source contributor: "causalml", "shap", "featureform"

LANGUAGES
- Russian (native) • English (fluent, TOEFL 106/120) • Japanese (beginner) • German (beginner) • French (beginner)