# Egor Koptelov







### SUMMARY

4rd year specialist MSU (Mechanics and Mathematics department) student. Has 3+ years of programming experience, 2+ years of Data Science & Research experience. Experience: Aramco Innovations, VR MSU, 7+ ML/DS projects.

## Work Experience

#### Aramco Innovations (research center of Saudi Aramco)

June 2023 - present

#### Responsibilities

Build and improve machine learning models using python for industrial applications in geology and geoscience domain. Creating datasets for machine learning model training using multidimensional tabular and time series data, Preparing and delivering the presentations with the results of computational experiments and interpretation of the machine learning results.

#### **Projects**

LogLAB: Industrial application for predicting porosity values in the well based on well-logging data

- Improved accuracy of prediction by implementing more advanced machine learning approaches: exploratory data analysis, data clustering, time series data processing methods, gradient boosting models.
- Optimized application performance in terms of time and memory by using code refactoring, CI/CD pipelines, profilers, linters etc.
  - Designed and developed a three page browser application GUI based on Streamlit python library

#### VR MSU (research laboratory in MSU)

September 2022 - May 2023

#### Achievements

- Developed the theory of differential neural networks and improved the accuracy of dynamic motion forecasting
  - Collected and marked up the data for learning neural networks to predict the maneuver of aircraft
  - Processing the video data for eye tracking

#### Personal projects

Shell.ai hackathon – Developed a machine learning model for efficient agricultural waste collection, by predicting the waste generation potential in a given geography.

Tenderchak – Built a predictive pricing system for the supplier portal using bert NLP nueral network ODS RL – Studied the basic approaches of reinforcement learning and built a multiple RL agents using Q-Learning, DQN, Policy Gradient

## EDUCATION

2020 - 2026 Specialist Degree at MSU (Mechanics and Mathematics department)

# TECHNICAL SKILLS

- Machine Learning, Deep Learning, Computer Vision, RL, Time Series
- Python, Git, Pandas, Numpy, SciPy, Scickit learn, PyTorch, CatBoost, XGBoost etc.