Roman Gataullin

Q graphoman1535 **≥** rghataullin96@gmail.com **→** +7 917 799 99 51

About Me

6th year student faculty of mechanics and mathematics at Lomonosov Moscow State University (MSU) with experience in Control and Navigation Laboratory. Actively studying and applying computer vision and neural network methods to solve practical tasks in image processing, data analysis and reinforcement learning.

Education

- Specialist Degree, Faculty of Mechanics and Mathematics, Lomonosov MSU (2020–2026)
- ShareMSU Classical Machine Learning and Computer Vision (2023–2024)
- Yandex ML-Training Reinforcement Learning (2025)
- Deep Learning School Foundations of Machine Learning and Neural Networks (2024–2025)

Skills

- Machine Learning, Deep Learning, Q-learning, Policy Gradients, Computer Vision.
- Python, Pandas, NumPy, Scikit-Learn, ultralytics, Cellpose, PyTorch, XGBoost, Optuna.
- Git, Docker, Conda, MLflow, basic Linux CLI,

Work Experience

Aramco Innovations — ML Engineer

6 months

- Cutting Size Analysis: R&D to estimate average particle size in drilling samples using state-of-the-art instance segmentation approach. Developed computer vision pipeline for segmenting and measuring individual particles to provide accurate cutting size distribution analysis.
- **TarModelling:** Optimized drilling fluid chemical composition using classical optimization techniques for maximum operational efficiency.
- Developed data processing pipelines for time-series datasets to facilitate model fine-tuning.

Laboratory of Control and Navigation, MSU — Research Intern

3 years

- Developed C-language simulator for IMU readings to model launch vehicle dynamics during space station deployment.
- Implemented satellite navigation (GNSS) data processing algorithms with filtering and integration techniques.
- Designed calibration methodology for strapdown inertial navigation systems (SINS), improving navigation precision.

Smart Engines — CV Engineer

6 months

- Developed computer vision algorithm for geometric primitive detection with 99.6% accuracy.
- Implemented bank card detection algorithm for document processing pipeline.
- Researched and optimized Mesh-to-CAD model comparison method for non-destructive testing (NDT).

Scientific Work

- IEEE Sensors Conference 2025 (Vancouver) Poster: "Inertial Measurement Unit Size Effect Calibration for Arbitrarily Rotated Accelerometer Triad".
- International School-Seminar NMC-2025 (Moscow) Presentation: "Calibration of Mass Displacements in Accelerometers of Strapdown INS for Arbitrarily Rotated Instrument Triads".