# **ANTON DOROFEEV**

## Machine Learning Engineer / Deep Learning Engineer / Data Scientist / Mathematician

#### **SKILLS**

### **Programming Languages**

Python, MATLAB

#### Tools

- PyCharm, Jupyter Notebook
- Bash, Git, TensorBoard, LaTeX

### Machine Learning & Computer Vision

- NumPy, SciPy, Pandas, Scikit-learn
- Matplotlib, Seaborn
- PyTorch, TensorFlow, Keras
- OpenCV

#### Other

- Mathematical Modeling
- Cybernetics
- Control Theory
- Vector Optimization

### **EXPERIENCE**

### **Computer Vision Engineer**

### Samsung Research

Feb 2022 – present

• DL HDR Frame Merge. Algorithms development, article writing, motion estimation and motion compensation improvements, noise reduction.

## **Junior Computer Vision Engineer**

## Aug 2021 - Feb 2022

• DL HDR Frame Merge. Data preprocessing, augmentation, motion estimation, motion compensation, noise reduction, neural networks training, framework development, algorithms development, idea generation, reading articles.

### **EDUCATION**

## St Petersburg University, Mathematics and Mechanics Faculty

**♀** St Peterburg, Russia

## Postgraduate Mathematics

**#** 2024

Dissertation topic: Method of control dynamic systems using artificial neural networks with dynamically changing coefficients.

## M.S. & B.S. Applied Mathematics and Computer Science

**#** 2020

*Graduation project*: Speed-gradient algorithm for the problem of classifying dynamic objects using artificial neural networks.

## **ACHIEVEMENTS**

- Executor of the RFBR grant "Methods of adaptation and machine learning in the problem of controlling complex systems through network communication channels", 2021.
- Supervisor of the course "Mathematical methods of machine learning for image recognition problems" at the Youth Mathematical School, St. Petersburg, 2020/21.
- Speaker and medalist of the session "Information processing in navigation systems" at the 21st Conference of Young Scientists "Navigation and Motion Control", St. Petersburg, 19-22 March 2019.

### **PUBLICATIONS**

# Dorofeev, A. (2019). "Gradient feedback method for training artificial neural networks".

Navigation and Motion Control. Proceedings of the 21st Conference of Young Scientists with international participants, SPb, Russia, 19-22 March 2019. SPb, Russia: CSRI Elektropribor, JSC, pp. 310–311.

### **COURSES & CERTIFICATES**

- Neural Networks and Computer Vision (Samsung Al)
- Python programming (Bioinformatics Institute)
- An Introduction to Data Science (SPbU)

- Probability theory (CS Center)
- Mathematical statistics (CS Center)
- An Introduction to Databases (CS Center)

### **FUN FACTS**

Visited 30 countries, hitchhiked over 100,000 km, hiked in 10 mountain ranges, rafted to Kara Sea.