NIKOLAI GAIDUCHENKO

Curriculum Vitae

@ Gaiduchenko.NE@gmail.com   yozh2   Moscow, Russia
+7 (925) 450-8299   yozh2   0000-0002-2724-0878

💼 WORK EXPERIENCE

Middle Data Scientist
PJSC «Almaz», R&D dept.

📅 12.18 – present   📍 Moscow, Russia

Hypersonic aircraft vehicle trajectory generation, forecasting and classification using Deep Learning models

Junior Data Scientist
Machine Intelligence Laboratory by K.V. Vorontsov

📅 09.18 – 10.19   📍 MIPT, Dolgoprudny, Russia

One-click Deep Learning pipeline for synthetic document dataset generation, text recognition models

Engineering Assistant
Samsung R&D, AI Algorithms Lab

📅 06.18 – 09.18   📍 Moscow, Russia

Deep learning and computer vision for self-driving robot

Engineering Assistant
Laboratory of Design of Special Computer Systems Architectures

📅 10.17 – 12.18   📍 MIPT, Dolgoprudny, Russia

Sub-array antenna modeling app for CAD Radar Python package *«PyPhased»*

🎓 EDUCATION

Moscow Institute of Physics and Technology

📅 2015 – present (6th year)   📍 Dolgoprudny, Russia

Phystech-School of Radio Engineering and Computer Science Master, Applied Mathematics and Physics, GPA: **9.2/10.0**

- Mathematics (Linear Algebra, Differential Equations, Probability, Statistics)
- General Physics, Theoretical and Quantum Mechanics, Field Theory, Statistical Physics
- Engineering, CAD, Micro Controllers, Radar Applications, Digital Signal Processing, Signal Theory
- Cryptography, Information Security Theory, Information Theory
- Computer Science, Computational Mathematics, ML algorithms and principles, Computer Vision

⭐ ACHIEVEMENTS

🏆 **Russian National Phystech Olympiad**
Prize winner: Physics

🏆 **MIPT Radio Engineering Competition**
Prize Winner

💵 **Abramov's Scholarship**
for excellent progress in 2018

💵 **Increased State Academic Scholarship**
for excellent progress in 2020, 2021

</> IT SKILLS

- **Python**: PyTorch, Keras, scikit-learn, PyQt5, pandas, numpy
- Git, Docker, Google Colaboratory, experience in using AWS Amazon web services for complex calculations
- LaTeX, Adobe Illustrator, huge experience in design and presentations

🔲 ENGINEERING SKILLS

- ROS, Arduino, AVR Micro Controllers
- OrCad, SolidWorks, Proteus
- Verilog, FPGA

✳️ RELEVANT COURSES

🐧 **Advanced C programming in UNIX environment**
by D. V. Lunev, core QEMU, Parallels, OpenVZ developer

🐍 **Kalman and Bayesian Filters in Python**
by Roger R. Labbe

📊 **Machine Learning and Data Analysis**
on Coursera by MIPT & Yandex

📊 **Building Deep Neural Networks in Python**
by Andrey Sozykin

🤖 **ROS Courses and Tutorials**
by Robot Ignite Academy

🎓 EDUCATION

Regional Lyceum for Gifted Children
📅 2013 – 2015　　　📍 Penza, Russia

Diploma with honours

Kaspersky Cybersecurity Summer Lab
📅 2017　　　📍 Kaluga Region, Russia

MIPT Summer Olympiad School
📅 2015　　　📍 Dolgoprudny, Russia

MIPT Extramural School of Physics and Mathematics
📅 2011-2015　　　📍 Dolgoprudny, Russia

Diploma with honours: physics, mathematics, computer science

Nanograd Summer School (by RUSNANO School League)
📅 2011-2014　　　📍 Russia

Research and Marketing Projects for Hevel, Hemacore, Bukvoed

SMILES Summer School of Machine Learning (Scoltech)
📅 2020　　　📍 Moscow, Russia

📖 PUBLICATIONS

👥 Conference Proceedings

- Gaiduchenko, N. E., Gritsyk, P. A., & Malashko, Y. I. (2020, November). Multi-Step Ballistic Vehicle Trajectory Forecasting Using Deep Learning Models. In 2020 International Conference on Engineering and Telecommunication (EnT) (pp. 1–6). Dolgoprudny, Russia.

- Gaiduchenko, N. E., & Gritsyk, P. A. (2019, November). Hypersonic Vehicle Trajectory Classification Using Convolutional Neural Network. In 2019 International Conference on Engineering and Telecommunication (EnT) (pp. 1–4). doi:10/ggxd56

🅰🈁 LANGUAGES

English
Advanced (C2)　　　● ● ● ● ●

Russian
Native speaker　　　● ● ● ● ●

Japanese
Beginner (A1)　　　● ○ ○ ○ ○

🎸 ACTIVITIES

Athletics　Swimming　Bowling

Motion design　Film making

Piano　Guitar　Singing

Member of student council