

# DMITRII IUNOVIDOV

[dm.iunovidov@gmail.com](mailto:dm.iunovidov@gmail.com) | +359 879 157 338 | [GitHub](#) | [Linkedin](#) | Nesebar, Burgas, Bulgaria

Over 10 years of experience in the fertilizer industry, scientific research, and device development. Began my career as a Junior Researcher, contributing to the development of 5 new techniques for physical and chemical analysis and created 3 software solutions for optical control devices and physical-chemical methods of control. Currently serving as an Innovation Director (R&D), leading a team of up to 12 people in developing computer vision systems. Achieved a significant improvement in code readability, increasing it from 3 to 9.2 according to pylint. Key Skills: Computer Vision, MLOps, Machine Learning, Data Analysis, Neural Networks, R&D Management.

**Technical Skills:** Python, FastAPI, Torch, OpenCV, Streamlit, Git, DVC, Docker, jupyter-hub, CVAT, ClearML, Nextcloud, GitLab, Ubuntu Server (R&D Infrastructure), CI/CD

## WORK EXPERIENCE

---

### Innovative Director (R&D)

2022 - now

**Autodoria LLC** | *Specializes in intelligent transport solutions, reducing road deaths by 51% and accidents by 15.6%*

Development and implementation of research and development strategies in the field of computer vision and scene analysis.; management of a team of developers (6 people) and annotators (6 people); recruitment and technical onboarding of new employees, tracking team metrics; project management; searching, analyzing, and testing options for product improvement; managing MLOps and Torch models for deploying and optimizing ML systems; preparation of the R&D budget; presentation of solutions to senior management and clients; evaluation of market and scientific trends.

- Implemented an automated testing system (pytest, GitLab runners, tox) and linters (black, pylint, flake 8), which led to an increase in code readability from 3 to 9.2.
  - Introduced code review and live coding practices (weekly classes), which led to an increase in development team efficiency from 1 to 5 merge requests/month.
  - Submitted 4 grant applications and 2 grant reports.
- 

### Machine Learning Engineer

2021 - 2022

**Rebels.ai** | *Company specializing in AI solutions for diverse industries*

- Built 3 neural network models with keras and pytorch (CNN, ResNet, LSTM), reviewed and written python code.
  - Analyzed and worked with data of up to 500 GB, optimized computations – reduced memory usage from 54 GB to 13 GB, implemented projects in climate and satellite monitoring.
- 

### Head of the Laboratory

2011 - 2022

**'NIUIF' Ltd.** | *Russia's only research institute specialising in phosphate rock processing technologies*

Managing a team of researchers (4 people); managing laboratory infrastructure; performing statistical analyses of data and planning experiments: development of new techniques and methods, data collection and accumulation (SCADA, MES)

- Created a team from scratch: searched for funding, selected equipment, hired staff.
  - Created a full cycle of assembly and launch of control devices for industry.
  - Achieved an increase in funding from 174,000 to 294,000 USD per year.
- 

### Senior Researcher ← Junior Researcher

- Wrote 2 software, modified 2 released software.
  - Developed 2 prototypes of quality control devices ('arduino', '3D printing', 'laser cut'), and created methods for their analysis.
- 

### Associate Professor | Senior Researcher

2018 - 2023

**Cherepovets State University** | *One of the leading research institutes in the field of mineral fertilizer production*

- Led research on ESG, satellite data, and computer vision; wrote 2 manuals, and published 5 papers.
- 

### PROJECT | MLOps Engineer - **LogicYield**

- MLOps and server infrastructure (ClearML, Minio, CVAT, GitLab CI/CD, Docker Compose, FastAPI, Jupyter-hub)
  - Developed and implemented software for industrial devices: backend and client modules (PyQt, OpenCV, scipy, numpy, pyserial, pyUSB, SQL, FastAPI, MQTT, multithreading)
  - Created and optimized unique object segmentation models for CPU operation, published 3 scientific papers at Q1, Q2 level (CNN + Fourier, CNN + BoundaryIoU)
- 

## EDUCATION

---

2017 **Institute for Analytical Instrumentation, Russian Academy of Sciences** | Doctor of Philosophy - PhD, Engineering

2012 **Moscow State University** | Analytical Chemistry and Nanotechnology, Graduated with Honors.

---

## ADDITIONAL INFO

**Languages:** English – C1, Bulgarian – A2, Russian – native

**Certificates and training:** 2019, [Microsoft Professional Program. Data Science](#)

2024, [Machine Learning in Computer Vision \(CVRocket\)](#)