

# Stepanenko Denis

---

St. Petersburg, Russia • +7 (909) 822-55-52

stdenis03@mail.ru • <https://t.me/StDenis03> • <https://github.com/diss03>

## Professional Summary

---

Data Scientist specializing in medical imaging AI, computer vision, and time series analysis, with hands-on experience developing deep learning models for segmentation, detection, classification and multi-agent system design. Proven ability to deliver production-ready solutions with strong metrics. Seeking an internship with potential for full-time employment to contribute to scalable AI systems in business, signal processing, or autonomous agent applications.

## Education

---

### Saint Petersburg Electrotechnical University "LETI"

St. Petersburg, Russia

Master of Science in Computer Science

till 2027

Specialization: Distributed Intelligent Systems and Technologies

### Saint Petersburg Electrotechnical University "LETI"

St. Petersburg, Russia

Master of Science in Applied Mathematics and Informatics

September 2021 – July 2025

Thesis: "Segmentation of Complex Breast Cancer Morphologies in DICOM

Format" - Developed 3D segmentation pipeline achieving DSC 87.83% and

HD95 6.26 mm on clinical datasets

## Professional Development

St. Petersburg, Russia

Intelligent Big Data Analysis, LETI

September 2023 – September 2024

IT Project Management, LETI

September 2025 – December 2025

## Experience

---

### STC

St. Petersburg, Russia

Data Science Intern

Jun 2024 – Jul 2024

- Trained YOLOv8x object detection model to localize radio signals on thermal maps, achieving F1-score 0.90 on approximately 10K annotated samples
- Implemented EfficientNet-B7 classifier with transfer learning for LoRa/GMSK signal recognition from amplitude-time spectrograms (time series classification)
- Modernized smoke detection pipeline by migrating to YOLOv8 architecture and simplifying image preprocessing workflow

### OncoDetect AI (LETI Startup Accelerator & IV

Russia

### All-Russian Tech Entrepreneurship Forum)

September 2025 – December 2025

Founder, Data Scientist

- Developing AI-powered medical software that automatically segments malignant breast tumors on routine chest CT scans, transforming standard CT procedures into high-precision diagnostic tools for breast cancer detection
- Solution integrates with hospital PACS systems to accelerate radiologist annotation workflows 40× faster, reduce tumor miss rates, and improve annotation accuracy
- Implemented hybrid transformer architecture (U-netR++) achieving 77.8% Dice coefficient and 3.57 mm Hausdorff distance (95th percentile) on complex breast cancer cases

**Key Projects:** <https://github.com/diss03>

## Skills & Interests

---

- **Technical:** Python, Machine Learning (ML), Deep Learning (DL), Statistics, PyTorch, MONAI, NumPy, Pandas, Scikit-learn, YOLO, Roboflow, Seaborn, Matplotlib, Docker, Git, Linux, experience with Yandex DataSphere and Google Colab, database design, PostgreSQL, MongoDB
- **Language:** English B2, Russian Native
- **Interests:** Language learning, sports/fitness, project development, finance