

Dmitry Shabat

Machine Learning Engineer

mitya.shabat@gmail.com

+972557715419

<https://www.linkedin.com/in/shabat-dmitry/>

I have a website!

xallt.github.io

Machine Learning Engineer proficient in rapid R&D: integrating state-of-the-art methods into production-ready solutions. Experienced in processing big 2D/3D data, and passion for efficient, elegant solutions to problems in Computer Vision. Looking for a team where I could work on tough problems!

Experience

ML Research Engineer, Gracia AI

03/2024 - Present

- Implemented Level-of-Detail (LoD), allowing unbounded immersive 3D scenes
- Shipped optimizations & improvements for viewing scenes on **edge devices**
- Optimized algorithms by implementing them in **CUDA**
- Implemented in-house **MLOps** automations for experiment running & evaluation
- Rapid **R&D**: implementing ideas from state-of-the-art research, evaluation, reporting to the team

ML Engineer, Clostra

04/2022 - 03/2024

- Reproduced variations of the **NeRF** architecture for **3D reconstruction** of static/dynamic scenes & full-body / head avatars, constantly keeping up with SOTA research
- Implemented various approaches using **GANs** / **Diffusion Models** for 3D generation / generative fill in 3D reconstruction
- Integrated **segmentation** / **object detection** / **depth estimation** models to improve 3D priors

ML Engineer, 3D Predict

07/2020 - 04/2022

- Sped up inference 3x by optimizing the Neural Network architecture
- Improved segmentation accuracy, leading to 2x revision speed by clinical experts
- Developed internal **MLOps** system based on **ClearML** for training & deploying models
- Shipped models used for estimating various attributes of teeth from CT scans

Software Developer Intern, Socinform

12/2019 - 04/2020

Implemented system for fast fuzzy-search over a large database of brand names in **.NET**

Game Developer Intern, FunExpected

06/2018 - 08/2018

Made a game in **Godot-Engine** that teaches kids basic concepts of algorithms.

One of the educational mini-games in **Funexpected Math**

Education

Bachelor of Science: Applied Mathematics and Informatics

Higher School of Economics - Moscow, Russia

Graduation date - 06/2024

Skills

- **Languages** - Python, C++, CUDA, Scala, Javascript
- **ML & CV** - PyTorch(3D), OpenCV, ClearML, Slurm, Spark, Hadoop
- **Computer Graphics** - OpenGL, ImGui, Unity, Godot Engine, Blender
- **Tools** - Git, CMake, Docker, Bazel, Github CI
- **Soft skills** - patient, open to discussing ideas with colleagues

Projects

Procedural noise texture generator (Three.js, React) – [link](#)

Mediapipe Hand Tracking in C++ / Python – [link](#)

OpenGL Ray Tracer (C++) - [link](#)

Languages

Russian – Native Speaker

English – Fluent

Hebrew – Aleph+

Interests

- **Sport** - Ping Pong / Volleyball / Rock Climbing / Skiing
- **Productivity** - obsessing over Obsidian as a Second Brain
- **Lecturing** - occasional lectures on my favorite tech topics. [Link to recordings](#)