# Foma Shipilov

foma@shipilov.ru · +7 977 134 04 60 · @foma2u Moscow, Russia



# **EXPERIENCE**

#### • Huawei

Assistant Engineer @ Noah's Ark lab

- Remastered TV-series using GANs;
- Developed non-linear CNN degradation model for super-resolution of real-world images.

November 2020 - September 2021

#### HSE University

Intern-researcher @ Institute of Artificial Intelligence (LAMBDA)

– Deep learning applications for online filtering and reconstruction of aerogel detectors;

What Machine Learning Can Do for Focusing Aerogel Detectors, Physics of Atomic Nuclei 86, 864 (2023) *November 2021 onwards* 

# • HSE University

Teaching Assistant @ Faculty of Computer Science Teaching Instructor @ Deep Learning 1 2020 – 2024, September 2023 onwards

# **EDUCATION**

#### MSc Data Science (Studied in English)

HSE University, Skoltech (MML joint programme)

Currently undergoing

# • MSc + PhD Track, Computer Science

HSE University

Currently undergoing

# • BS Computer Science

HSE University 2023, Academic Honors Diploma

# **PROJECTS**

# • **HiFi-GAN** [github.com]

Implementation of HiFi-GAN NeurIPS 2020 paper *PyTorch* 

• **secHNet** [github.com]

PyTorch in Haskell from scratch

Haskell, C

# **SKILLS**

### • ML & Data Analysis

- Computer vision, super-resolution, GANs, diffusion models, transformers, deep learning for audio, deep Bayesian learning, mode connectivity & permutation invariance
- PyTorch, scikit-learn, OpenCV, NumPy, JAX, PySpark, Hadoop, Vowpal Wabbit

# Languages

Python, C, C++, C#, Haskell, x86/ARM Assembly, HTML/CSS, ReactJS, Lua

#### CI/CD & Other

Docker, WandB, GitHub Actions, QuickCheck, GDB, Arch Linux, Shell

## AWARDS & RECOGNITION

# • Yandex Scholarship

HSE University Laureate 2022

# Vysshaya Liga, Math & Informatics

HSE University Degree I & III Diploma 2021, 2022

#### Ya Professional, Math Olympiad

Yandex Prize-winner 2021, 2022

### Phystech, Math & Physics Olympiads

Moscow Institute of Physics and Technology Winner 2019

### **HOBBIES & INTERESTS**









Animation

Music production

Custom keyboards Alpine skiing