Foma Shipilov

foma@shipilov.ru · @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, LLMs, 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

 Alpine skiing

 Music production

 Hypercubing

 Custom keyboards