Foma Shipilov

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Moscow, Russia

EXPERIENCE

- **HSE University**
  Intern-researcher @ 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)
  Machine Learning for FARICH Reconstruction at NICA SPD, MSU Physics Bulletin 79 S2, 906 (2024)
  November 2021 onwards

- **HSE University**
  Lecturer @ Deep Learning 1
  Course Instructor @ Deep Learning 1
  Teaching Assistant @ Faculty of Computer Science
  2024 onwards, 2023 onwards, 2020 – 2024

- **Sber**
  Manager @ Anti-Fraud Department
  – Developed an anti-fraud AI solution (joint with HSE)
  August 2024 – December 2024

- **Sber**
  Intern @ Sber AI Lab
  – Applied Temporal Point Process models to MIMIC-IV medical dataset.
  March 2024 – August 2024

- **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

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

SKILLS

- **ML & Data Analysis**
  – Computer vision, super-resolution, GANs, diffusion models, RNNs, transformers, deep learning for audio, deep Bayesian learning, mode connectivity
  – PyTorch, scikit-learn, OpenCV, NumPy, JAX, Polars, PySpark, Hadoop, Vowpal Wabbit

- **Languages & Frameworks**
  Python, C, C++, C#, Haskell, x86/ARM Assembly, HTML/CSS, ReactJS, Lua

- **CI/CD & Other**
  Docker, WandB, Hydra, GitHub Actions, QuickCheck, GDB, Arch Linux, Shell, ZFS

AWARDS & RECOGNITION

- **Yandex Scholarship**
  HSE University
  2022

- **Vysshaya Liga, Math & Informatics**
  HSE University
  Degree I & III Diploma
  2021, 2022

- **Ya Professional, Math Olympiad**
  Yandex
  Prize-winner
  2021, 2022

PROJECTS

- **HiFi-GAN [github.com]**
  Implementation of HiFi-GAN NeurIPS 2020 paper
  PyTorch

- **secHNet [github.com]**
  PyTorch in Haskell from scratch
  Haskell, C

HOBBIES & INTERESTS

Alpine skiing   Hypercubing   Homelab   Custom keyboards