Mishan Aliev

Moscow

Education

HSE University 2024 – 2027

Faculty of Computer Science, PhD student in Computer Science

HSE University 2022 – 2024

Faculty of Computer Science, Master of Data Science

GPA: 9.05/10.

MIREA - Russian Technological University

2018 - 2022

Institute of Cybernetics, Bachelor of Applied Mathematics and Computer Science

GPA: 4.97/5.

Experience

Bayesian Methods Research Group

November 2022 — Present

Researcher

- O Exploration of generative models of images and 3D data, texture generation.
- O Participation in the industrial project on shadow generation.
- Participation in the industrial project on acceleration of diffusion models.

Projects

Procedural generation of the game map layout | C++, OOP

GitHub

Developed a city map model and implemented its procedural generation for each new game session.

Detection of chess pieces in images | Python, PyTorch, Computer Vision

GitHub

Implementation of a pipeline for object detection of chess pieces in images.

Interpretable neural networks | Python

GitHub

Developed and tested interpretable neural networks (Neural Formal Concept Analysis).

Social network analysis | *Python, Graphs*

GitHub

Analytical exploration of my personal social network derived from the social platform VK.

Skills

Languages English (upper-intermediate), Russian (native).

Programming Python, C/C++, Julia, MATLAB/Octave, SQL.

Git, Linux, Visual Studio Code, Docker.

Activities

- Presented research on "Kinetic Study of Spatial Spread of COVID-19 Waves" at the RGD32 International Symposium (July 2022) and ESMED International Conference (August 2022). Paper accepted for publication.
- Completed Deep Learning School from MIPT (1st degree diploma) and Deep Learning course from Tinkoff Generations (certificate).
- o Completed the SMILES 2024 Summer School from Skoltech (certificate) and advanced training on "Generative Models Based on Adversarial Learning" (certificate).
- Taught courses on "Text Analysis. Generative Models" and "Deep Learning 1" at the Faculty of Computer Science, HSE University.