Danila Biktimirov

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Education

Neapolis University Pafos — Paphos, Cyprus
BSc in Applied Computer Science — *Oct. 2022 – Feb. 2025*
Awarded JetBrains-sponsored education for math and programming undergraduates
Relevant courses: Computer Vision, Robotics, Machine Learning, Deep Learning, Image Processing, Computer Graphics, Distributed systems, Computer Networks, Game Design & Development, GNN, Information Theory

Higher School of Economics — Moscow, Russia
BSc in Applied Mathematics and Informatics — *Aug. 2020 – May 2024*
Relevant courses: Bayesian Methods for ML, Machine Learning, Deep Learning, Reinforcement Learning, Statistical Learning Theory, Deep Learning for Graph Data Analysis, Generative Models in DL, One-Way Functions, Combinatorial Constructions, Theory of Computation, Convex Optimization and Approximation algorithms

Higher School of Economics — Moscow, Russia
BSc in Mathematics, incomplete — *Aug. 2019 – May 2020*

Experience

JetBrains (JB Academy) – Internship | *Python* — Aug. 2024 – Present
- Creation of a machine learning club for schoolchildren to prepare for the International AI Olympiad
- Creation Graph Representative Learning course for JetBrains students

JetBrains (Intellij IDEA) – Summer internship | *Kotlin* — Aug. 2024 – Oct. 2024
- Developed a tool to automate accessibility audits of IntelliJ-based IDEs, ensuring improved usability for users with disabilities.
- Integrated audit features into an existing UI inspection tool for Java Swing, analyzing accessibility metadata for potential issues

Higher School of Economics and Neapolis University Pafos – Teacher assistant — Sept. 2022 – Present
- Assisted in teaching and curriculum development for calculus (first and second years), discrete math, machine learning, and deep learning courses
- Provided instructional support to students, conducted review sessions, and offered guidance on assignments and projects. Contributed to grading assignments, exams, and projects.

Projects

Hi-C phasing for polyploids – with NHGRI — Sept. 2024 – Present
- Developing novel methods for Hi-C phasing to cluster assembly graph nodes into haplotypes for polyploid genomes, with a focus on tetraploid potato genomes
- Addressing challenges in graph partitioning for polyploid genome assembly, exploring alternatives to existing algorithms to improve performance and accuracy

Manga colorization with diffusion models and benchmarking methods — Nov. 2023 – May 2024
- Implementation conditional diffusion model for colorization
- Creation benchmarking methods for colorization task

Q&A Bot — May 2023 – Aug. 2023
- Developed Telegram bot using AIOGram, answering queries from chat history, represented as vector space
- Researched Russian-speaking QA models for enhanced natural language processing
- **Technical Skills:** aiogram, LangChain, HuggingFace, Git, FAISS

Prediction of phlebological diseases using PINN and bifurcation analysis — Sept. 2022 – May 2023
- Deep learning research coursework
- Implementation of neural network based on PINN and BiNN, augmentation of MRI and CT images using GAN
- **Technical Skills:** TensorFlow, HuggingFace, HSE HPC "cHARISMa"

Technical Skills

Programming languages: Python, C, C++, Kotlin, SQL, bash
Developer Tools: Git, Docker, Jupyter Notebook
Frameworks & Libraries: Scikit Learn, Pandas, Numpy, Seaborn, MatPlotLib, Pytorch, Tensorflow, Theano

Languages

Russian: Native
English: Intermediate B2
German: Pre Intermediate A2

Achievements

Winner of Math Competition of SPbU (2019), Prizewinner of several all-Russian Math Competitions

Other

Currently working as a private Maths tutor, various volunteering experience. Some online courses certificates