SERGEI SMIRNOV

Data scientist. Interested in Foundation models, NLP and HCI. Date of CV: 01.02.2025

mg1sergey@gmail.com ⬦ linkedin.com/in/seriozh1/ ⬦ github.com/seriozh1/ ⬦ Helsinki, Finland

WORK EXPERIENCE

Doctoral Researcher, University of Helsinki   Sep 2024 - Present

- Researching and building LLLm based agent for harassment mitigation and assistants in Virtual Reality environment. Supervisor: Prof. Giulio Jacucci.

Machine Learning Engineer, SMEY.AI   Jun 2024 - Present

- Building predictive model to optimize the selection of yeast strains for fermentative oils production, improving the fatty acids profile and oil yield. The model reduces the need for extensive manual screening and testing.

Research Assistant, LUT University   Sep 2023 - May 2024

- Involved in EU ERASMUS+ MEDIA as the designer and teacher for the Modules "Math essentials" and "Semantic analysis" of the "Learning analytics for practitioners" course with **250+ students**.
- Working on **research project** "Development of a Metric for Robust Model Evaluation with Noise Added to Test Data". This work investigates the impact of noise injection into text data on the robustness of AI models. By analyzing how models perform with intentionally introduced noise, we aim to not only evaluate their resilience, but potentially uncover a novel technique for enhancing model training. Supervisor: Prof. Leonid Chechurin.

Machine Learning Engineer, Epoch8   Nov 2022 - July 2023

- Contributed to open source datapipe project by implementing multi-threaded execution of data processing graph using Ray.
- Developed a chatbot on Rasa for an industrial company Ebraz.
- Build from scratch user search system and improved recommendation system for social network company (Looky).

Machine Learning Engineer, Somin.ai   Nov 2021 - July 2022

- Conducted **research** on improving tailored Facebook advertisement model.

Teacher, Krasnoyarsk Olympiad School   Sep 2018 - Sep 2020

- Python and Cryptography courses. **30+ students**. Student's final project - Github.

EDUCATION

Phd in Computer Science, University of Helsinki, Finland   2025 - 2029
Focus: Foundation models, NLP, HCI, Supervisor: Prof. Giulio Jacucci.

M.Sc in Technologies, Lappeenranta–Lahti University of Technology (LUT), Finland   2023 - 2024
Focus: Machine Learning (ML), GPA 3.79/4.0, Supervisor: Prof. Leonid Chechurin.

B.Sc. in Computer Science, Saint Petersburg National Research University of Information
Technologies, Mechanics and Optics (ITMO), Russia   2019 - 2023
Focus: Computer Science (CS) and Machine Learning (ML), GPA 3.90/4.0.

AWARDS

- **Dell Technologies First-Year Student Grant** for demonstration of great achievements in mathematics and IT learning for which he is awarded.

PUBLICATIONS

- Smirnov, Sergei, A metric for robust model evaluation through text perturbations, 2024. Available at LutPub.
- A. Bellucci, G. Jacucci, K. Duong, P. K Das, S. Smirnov, I. Ahmed, and J. Lugrin, Immersive Tailoring of Embodied Agents Using Large Language Models, Proceedings of the The 32nd IEEE Conference on Virtual Reality and 3D User Interfaces, 2025. Available at IEEE.