# **Alexander Shirnin**

alexamailwork@gmail.com • t.me/icecreamflavors

## Work experience

#### **HSE Computational Pragmatics Lab**

Al Researcher, NLP Safety & Robustness

• Led multiple research projects on vision-and-language model robustness and hallucination detection.

- O Published in top-tier venues: IEEE/ACM TASLP (Q1), SemEval (ACL-affiliated workshops).
- Supervised student research; co-authored 2 accepted papers at SemEval-2025.
- O Coordinated team efforts for SemEval-2024, winning 2nd place among 33 international teams.
- Acted as reviewer for ACL and IEEE journals, contributing to academic community.

#### **Private Education Platform**

May 2025 - June 2025

Oct 2021 - now

Course Developer & Instructor

- Designed and delivered an introductory machine learning course for professionals with no technical background. Adapted ML topics to a general audience, balancing clarity and technical rigor.
- Developed presentations, recorded video lectures, and built accessible teaching materials.
- O Successfully completed the project under a highly compressed timeline, taking full ownership from concept to delivery.

#### Cultural Heritage Tech Startup - Objet.art

Aug 2024 - Sep 2024

AI Consultant

- O Led the design of an AI pipeline to extract structured tags from museum object descriptions and metadata using LLMs.
- O Defined evaluation metrics, data preparation requirements, and validation protocols for internal benchmarking.
- O Built and tested a LangChain-based system; evaluated prompt strategies and model outputs.
- O Acted as project architect: aligned technical design with business objectives and guided solution direction.

HSE University May 2024

Exam Content Contributor

 Designed exam tasks and materials for data analysis modules. Collaborated with faculty to align assessments with course learning outcomes.

HSE University Jan 2023 – Mar 2023

Teaching Assistant

Taught Python programming to undergraduate students in an applied data analysis course.

### **Publications**

- 1. **A. Shirnin**, N. Andreev, S. Potapova and E. Artemova, "Analyzing the Robustness of Vision & Language Models," in IEEE/ACM Transactions on Audio, Speech, and Language Processing, vol. 32, pp. 2751-2763, 2024.
- 2. A. Kudelya and **A. Shirnin**, "Lacuna Inc. at SemEval-2025 Task 4: LoRA-Enhanced Influence-Based Unlearning for LLMs," in Proceedings of the 19th International Workshop on Semantic Evaluation (SemEval-2025), 2025.
- 3. L. Morozov, A. Mogilevskii, and **A. Shirnin**, "Empaths at SemEval-2025 Task 11: Retrieval-Augmented Approach to Perceived Emotions Prediction," in Proceedings of the 19th International Workshop on Semantic Evaluation (SemEval-2025), 2025.
- 4. N. Andreev, **A. Shirnin**, V. Mikhailov, and E. Artemova, "Papilusion at DAGPap24: Detecting Al-generated Scientific Papers," in Proceedings of the 4th Workshop on Scholarly Document Processing (SDP), pp. 215–219, Aug. 2024.
- 5. **A. Shirnin**, N. Andreev, V. Mikhailov, and E. Artemova, "Alpom at SemEval-2024 Task 8: Detecting Al-produced Outputs in M4," in Proceedings of the 18th International Workshop on Semantic Evaluation (SemEval-2024), pp. 1667–1672, June 2024.

## **Education**

National Research University HSE

Nov 2024 - now

PhD student, Computer Science

National Research University HSE

MS in Business Analytics and Big Data Systems

Sep 2022 – July 2024 GPA: 7.83/10

National Research University HSE

Sep 2018 – July 2022

BS in Applied Mathematics and Informatics

GPA: 8.2/10

# **Skills**

**Leadership & Communication:** Team mentoring, research supervision, project coordination, technical writing, peer reviewing (ACL, IEEE).

**Competitions:** Kaggle Competitions Expert (highest ranking was 488/200,000 in global rating); 5 silver medals, 6 bronze medals. 3x top-5 finishes in SemEval, AJCAI, WSDM Cup competitions.

**Python libraries:** PyTorch, HuggingFace, LangChain, vLLM, Pandas, Numpy, Scipy, Sklearn, XGBoost, Matplotlib. **Languages:** English (advanced, C1), Russian (native speaker).