ALEXANDER PANFILOV

■ kotekjedi@gmail.com | ⊕ | ☐ | ○ | Tübingen, Germany

ABOUT

I am a second-year PhD student working on LLM safety, including jailbreaks, prompt injections, and methods for building safer models. I am currently looking for an internship for the 2025/2026 academic year.

EDUCATION

IMPRS-IS / ELLIS | PhD Machine Learning

May 2024 - TBD | Tübingen, Germany

University of Tübingen | MSc Machine Learning

Oct 2021 - Apr 2024 | Tübingen, Germany

ITMO University | BSc Software Engineering

Sep 2017 - Jun 2021 | Saint Petersburg, Russia

RESEARCH EXPERIENCE

ELLIS Institute Tübingen | Doctoral Student

May 2024 - TBD | Tübingen, Germany

Jonas Geiping's Group (SEAL), co-supervised by Maksym Andriushchenko

- Contributed to architectural instruction-data separation that mitigates prompt injections, with results accepted at the ICLR 2025 Workshop (oral) on Building Trust in Language Models and Applications.
- Successfully adapted discrete optimization jailbreaking attacks to a perplexity constraint, with results accepted at the **NeurIPS 2024 Workshop (oral)** on Red Teaming GenAl and **ICML 2025**.

MPI for Intelligent Systems / University of Tübingen | RESEARCH ASSISTANT

May 2022 - Apr 2024 | Tübingen, Germany

Wieland Brendel's Group (RobustML)

Proposed and implemented a novel regularization method enabling combinatorial generalization in object-centric
models. Results accepted at ICLR 2024 (oral), ranking in the top 1.2% of submitted papers.

ITMO University | RESEARCH ASSISTANT

Nov 2019 - Oct 2021 | Saint Petersburg, Russia

Machine Learning Lab

 Contributed to research on exploiting simplicity bias for adversarial training and domain adaptation via optimal transport, with results published at the ICML 2022 Workshop on AdvML Frontiers and Collaboration

Center for Learning Analytics

• Developed digital student profiles and engineered a machine learning system to predict academic outcomes and potential student expulsions aiding early intervention planning.

Robert Bosch | Research Intern

Jun 2020 - Nov 2020 | Saint Petersburg, Russia

• Worked on disentanglement in VAEs for identifying cost-effective yet high-performing motor designs.

INDUSTRY EXPERIENCE

X5 Group | Data Scientist

Nov 2020 - Oct 2021 | Moscow, Russia (remote)

- Designed and conducted A/B testing experiments to evaluate the efficacy of various business initiatives, performed ad-hoc analytics to support decision-making processes within Russia's largest offline retail chain.
- Mentored three interns, all subsequently securing full-time roles within the company.

Yandex | Machine Learning Engineer Intern

Feb 2020 - May 2020 | Moscow, Russia

• Optimized the push notification system at Yandex.Zen for personalized timing of notifications.

SELECTED PUBLICATIONS

· conference paper

Capability-Based Scaling Laws for LLM Red-Teaming

Panfilov, A., Kassianik, P., Andriushchenko, M., and Geiping, J. arXiv preprint (2025)

• conference paper – equal contribution

An Interpretable N-gram Perplexity Threat Model for Large Language Model Jailbreaks,

Boreiko, V.*, Panfilov, A.*, Voracek, V., Hein, M., and Geiping, J. *ICML 2025*

· workshop paper

ASIDE: Architectural Separation of Instructions and Data in Language Models

Zverev E., Kortukov E., Panfilov, A., Volkova A., Tabesh S., Lapuschkin S., Samek W., and Lampert H Ch. *ICLR 2025 Workshop on Building Trust in Language Models and Applications (Oral)*

• conference paper – equal contribution

Provable Compositional Generalization for Object-Centric Learning

Wiedemer, T.*, Brady, J.*, Panfilov, A.*, Juhos, A.*, Bethge, M., and Brendel, W. *ICLR 2024 (oral)*

AWARDS

- **DAAD Scholarship (2021), Top 3%**: Selected as one of \sim 30 Russian students from \sim 1,000 applicants for a two-year DAAD-funded master's program in Germany.
- "Ya-Professional" Student Olympiad Winner (2021), Top 2%: Achieved prizeholder status in AI and ML tracks, with only 3,881 out of 177,100 participants (among all tracks) receiving this distinction.

FULL PUBLICATIONS LIST

· conference paper

Capability-Based Scaling Laws for LLM Red-Teaming

Panfilov, A., Kassianik, P., Andriushchenko, M., and Geiping, J. arXiv preprint (2025)

• conference paper – equal contribution

An Interpretable N-gram Perplexity Threat Model for Large Language Model Jailbreaks

Boreiko, V.*, Panfilov, A.*, Voracek, V., Hein, M., and Geiping, J. *ICML 2025*

· workshop paper

ASIDE: Architectural Separation of Instructions and Data in Language Models

Zverev E., Kortukov E., Panfilov, A., Volkova A., Tabesh S., Lapuschkin S., Samek W., and Lampert H Ch. *ICLR 2025 Workshop on Building Trust in Language Models and Applications (Oral)*

• workshop paper - equal contribution

A Realistic Threat Model for Large Language Model Jailbreaks

Boreiko, V.*, Panfilov, A.*, Voracek, V., Hein, M., and Geiping, J. *NeurIPS 2024 Red Teaming Gen AI Workshop (oral)*

• conference paper - equal contribution

Provable Compositional Generalization for Object-Centric Learning,

Wiedemer, T.*, Brady, J.*, Panfilov, A.*, Juhos, A.*, Bethge, M., and Brendel, W. *ICLR 2024 (oral)*

· conference paper

A Minimalist Approach for Domain Adaptation with Optimal Transport

Asadulaev, A., Shutov, V., Korotin, A., Panfilov, A., Kontsevaya, V., and Filchenkov, A. *Proceedings of The 2nd Conference on Lifelong Learning Agents, PMLR 232:1009-1024, 2023*

· workshop paper

Easy Batch Normalization,

Asadulaev, A., Panfilov, A., and Filchenkov, A. ICML 2022 AdvML Frontiers Workshop, 2022,

· workshop paper

Multi-step domain adaptation by adversarial attack to $\mathcal{H}\Delta\mathcal{H}$ -divergence,

Asadulaev, A., Panfilov, A., and Filchenkov, A. ICML 2022 AdvML Frontiers Workshop, 2022,

conference paper

Recommender system for an academic supervisor with a matrix normalization approach,

Kazakovtsev, V., Oreshin, S., Serdyukov, A., Krasheninnikov, E., Muravyov, S., Bezvinnyi, A., Panfilov, A., Glukhov, I., Kaliberda, Y., Masalskiy, D., Podolenchuk, T., and Khlopotov, M.

Proceedings of The 2020 1st International Conference on Control, Robotics and Intelligent System (CCRIS '20)

• conference paper

Implementing a Machine Learning Approach to Predicting Students' Academic Outcomes

Oreshin, S., Filchenkov, A., Petrusha, P., Krasheninnikov, E., Panfilov, A., Glukhov, I., Kaliberda, Y., Masalskiy, D., Serdyukov, A., Kazakovtsev, V., Khlopotov, M., Podolenchuk, T., Smetannikov, I., and Kozlova, D. *Proceedings of The 2020 1st International Conference on Control, Robotics and Intelligent System (CCRIS '20)*

chapter

The Use of Students' Digital Portraits in Creating Smart Higher Education: A Case Study of the AI Benefits in Analyzing Educational and Social Media Data_®

Oreshin, S., Filchenkov, A., Kozlova, D., Petrusha, P., Lisitsyna, L., Panfilov, A., Glukhov, I., Krasheninnikov, E. and Buraya, I.

In: Uskov, V., Howlett, R., Jain, L. (eds) Smart Education and e-Learning 2020