Daniil Cherniavskii

📍 Amsterdam

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🌐 Website

🔗 LinkedIn

🔘 Github

🔵 Google Scholar

Born 13 May 1997

Research interests: **Reasoning, Planning, Code generation, Embodied AI**

EDUCATION

September 2023 - Present

PhD student at University of Amsterdam

- Working on enhancing reasoning, planning and code generation abilities of LLMs, with applications to Embodied AI.

September 2020 – June 2022

Master's degree in Data Science

Double degree program at Skolkovo Institute of Science and Technology and Moscow Institute of Physics and Technology (Top 1 and Top 5 CS universities in Russia)
- Received diploma with honors
- Performed research on Topological Data Analysis and Deep LearningM
- Thesis: "Topological Autoencoders" (Grade: **A**)
- GPA: 3.9 / 4

September 2015 – July 2020

Bachelor's degree in Physics and Applied Mathematics

Moscow Institute of Physics and Technology (Top 5 CS university in Russia)
- Major in Data Science
- Performed research in Natural Language Processing

WORK EXPERIENCE

February 2022 - August 2023

Researcher at AIRI

Artificial Intelligence Research Institute, Moscow, Russia
- Worked on applications of topological data analysis to various fields such as representation learning, knowledge distillation, natural language processing, Embodied AI.
- A record of accepted publications (ICLR 2023, EMNLP 2022, ICASSP 2023).

June 2021 - August 2021

Research intern at Huawei

Noah's Ark Lab, Moscow, Russia
- Performed a research on adversarial text generation with the help of topological features of Transformer-like models.

October 2019 – May 2021

Research assistant at DeepPavlov.ai

Moscow Institute of Physics and Technology, Moscow, Russia
- Represented MIPT in the chat-bot competition called Amazon Alexa Prize Socialbot Grand Challenge 3 as the member of DREAM team.
- Developed a system of large-scale user intent detection responsible for the user-bot interaction and maintained it through the entire competition.
- Participated in development of an automated English essay review system during "Readable" competition. Our team became the absolute winner, and the solution was implemented in high-school state exams.

SELECTED PUBLICATIONS

#1   Kushnareva, L., Cherniavskii, D., Mikhailov, V. et al.
Artificial Text Detection via Examining the Topology of Attention Maps
In Proceedings of the 2021 Conference on Empirical Methods in Natural Language Processing (pp. 635-649). 2021, November. link

#2   Trofimov I., Cherniavskii, D. et al.
Learning topology-preserving data representations
Accepted to ICLR 2023. link

#3   Cherniavskii, D. et al.
Acceptability Judgements via Examining the Topology of Attention Maps
Accepted to Findings of EMNLP 2022. link

SKILLS

Technical skills
- Python: PyTorch, Tensorflow, JAX, Flax, OpenCV, etc.
- C/C++
- SQL, Docker, Kubernetes, Git, Bash, LaTeX

Languages
- English (Fluent)
- German, Dutch (Basic)
- Russian (Native)