IRINA SAPARINA

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PROFILE

I am a final-year Ph.D. student at the University of Edinburgh, under the supervision of Prof. Mirella Lapata. I work on AI, Natural Language Processing and Understanding, with a research focus on Semantic Parsing and Code Generation, particularly in text-to-SQL parsing. My primary area of interest is addressing linguistic variability, ambiguity, robustness, and generalization.

EDUCATION

Ph.D. student in Informatics, The University of Edinburgh Thesis: Linguistic Variability and Ambiguity in Semantic Parsing	October 2022 - present <i>Edinburgh, UK</i>
Ph.D. student in Computer Science, HSE University (GPA: 9.5/10.0) Thesis: Augmenting Semantic Parsing with Intermediate Representations and Search	November 2020 - August 2022 Moscow, Russia
Master of Computer Science, HSE University (GPA: 9.5/10.0) Thesis: Cost-sensitive training for autoregressive models	September 2018 - June 2020 <i>Moscow, Russia</i>
Bachelor of Computer Science, Moscow State University (GPA: 4.9/5.0) Thesis: Language-Independent Methods of Extracting Keywords in Web Texts	September 2014 - June 2018 Moscow, Russia
WORK EXPERIENCE	

Samsung Laboratory, Research Assistant

Yandex Research, Research Assistant

June 2018 – July 2020

July 2020 - September 2022

Developed imitation learning algorithms for training sequence prediction models.

Improved training and inference in text-to-SQL semantic parsing using auxiliary annotation.

Laboratory of Programming Technologies, Moscow State University, Intern

June 2017 – September 2017

Developed a Python tool for analyzing texts posted on social media.

Moscow, Russia

Moscow, Russia

Moscow, Russia

PUBLICATIONS

Disambiguate First Parse Later: Generating Interpretations for Ambiguity Resolution in Semantic Parsing PDF, Code Irina Saparina and Mirella Lapata.

Findings of ACL 2025.

AMBROSIA: A Benchmark for Parsing Ambiguous Questions into Database Queries.

PDF, Website

Irina Saparina and Mirella Lapata.

NeurIPS 2024 (Spotlight).

Improving Generalization in Semantic Parsing by Increasing Natural Language Variation.

PDF, Code

Irina Saparina and Mirella Lapata.

EACL 2024 (Oral).

Searching for Better Database Queries.

PDF, Code

Anton Osokin and **Irina Saparina** and Ramil Yarullin.

Findings of EACL 2023.

SPARQLing Database Queries from Intermediate Question Decompositions.

PDF, Code

Irina Saparina and Anton Osokin.

EMNLP 2021.

Cost-Sensitive Training for Autoregressive Models.

PDF

Irina Saparina and Anton Osokin.

WiML @ NeurIPS 2019.

TEACHING & SERVICE

Reviewer: WiML @ NeurIPS 2019, EMNLP 2023, ACL ARR 2024 February (ACL 2024), June (EMNLP 2024), February 2025 (ACL 2025), NeurIPS 2025

Teaching Assistant, Foundations of Natural Language Processing, University of Edinburgh Seminar Teacher, Teaching Assistant, Deep Learning, HSE University Teaching Assistant, Bayesian Methods of Machine Learning, MSU and HSE University

Spring 2025 Spring 2019, Fall 2019, Fall 2020 Fall 2018

SKILLS

- Python (daily use), SQL, C/C++
- PyTorch, HF Transformers, Git, Docker, Linux, Slurm, Kubernetes, LaTeX