

ROKSANA GOWOREK

[Email](#) ◊ [LinkedIn](#) ◊ [GitHub](#)

EDUCATION

PhD Candidate, Queen Mary University of London September 2023 - Expected September 2027
Investigating how language models generalise across languages and contexts by analysing internal representations, cross-lingual transfer, and semantic ambiguity. Developing benchmarks and evaluations for low-resource settings.
BSc Artificial Intelligence, The University of Edinburgh, *First Class Honours* September 2019 - June 2023
Built strong foundations in Machine Learning, Natural Language Processing, Maths, Programming and Research

NOTABLE PUBLICATIONS

“Multilinguality Does not Make Sense: Investigating Factors Behind Zero-Shot Transfer in Sense-Aware Tasks” ([EMNLP 25](#))
“Definition Generation for Word Meaning Modeling: Monolingual, Multilingual, and Cross-Lingual Perspectives” ([EMNLP 25](#))
“Bridging Language Gaps: Advances in Cross-Lingual Information Retrieval with Multilingual LLMs” (Internship, [arXiv](#))
“What Drives Cross-lingual Ranking? Retrieval Approaches with Multilingual Language Models” (Internship, [arXiv](#))
“SenWiCh: Sense-Annotation of Low-Resource Languages for WiC using Hybrid Methods” ([SIGTYP 2025](#))
“Towards Sentiment-Aware Semantic Change Analysis” ([EAACL 2024 Student Research Workshop](#))

EXPERIENCE

AI Research Intern, The Alan Turing Institute June 2025 - November 2025 & June 2026 - Present

- Conducted an extensive literature review on cross-lingual information retrieval, resulting in a survey paper
- Combined and evaluated advancements in ranking, re-ranking, and multilingual language representations
- Synthesized findings into a paper and presented results to stakeholders

AI Software Developer, Copylab June 2023 - May 2025

- Independently developed 9 tools, reducing the time required to complete key tasks by up to 50%
- Led full lifecycle projects (requirements, design, front-end, deployment, maintenance) including web scraping, info streams monitoring, data manipulation, and retrieval-augmented generation to present processed data

Tutor, Lab Demonstrator, Mentor
Queen Mary University of London September 2023 - Present
Demonstrator and marker for UG & PG courses: “Natural Language Processing”, “Neural Networks and Deep Learning”, “Data Analytics”, “Introduction to Natural Language Processing”

The University of Edinburgh October 2022 - April 2023
Tutor for “Software Engineering and Professional Practice”, Lab Demonstrator for “Inf-1 Cognitive Science”, Mentor of 3 groups of around 9 students for “Software Design Project”

University Leadership - President, Secretary, Podcast Coordinator October 2019 - June 2023
Cognitive Science Society, *The University of Edinburgh*
Prepared and/or delivered 50+ academic talks, including international conferences and collaborative events

PROJECTS

UG Dissertation - Investigated attention and hidden units of language models fine-tuned on a multi-class dataset, and probed them for implicitly learned linguistic features, both relevant and irrelevant to the training task

Mechanistic Interpretability Hackathon - Researched neural network interpretability, identifying linguistic features in BERT’s context vectors ([In search of linguistic concepts: investigating BERT’s context vectors](#)), and the impact of layer selection on knowledge distillation ([Distillation by duplication: The importance of layer selection](#))

Project Manager, Software Design Project (SDP) course - Led agile meetings, delegated tasks, guided product development using surveys and inclusivity research. Delivered 3 sprint reports, presented progress at 5 client demos

SKILLS

Languages	Python, Java, R
ML & NLP	PyTorch, TensorFlow, HuggingFace, Scikit-learn, LLM Training, LoRA, Machine Translation
Systems	SQL, Docker, Git, Weights & Biases, HPC and Google Cloud Platform
Domain Knowledge	Interpretability, Cross-Lingual Transfer, Alignment, Information Retrieval, Transformers