

# Daniil Gurgurov

[LinkedIn](#) | [+4915510434188](#) | [d-gurgurov.github.io](#) | [dgurgurov@gmail.com](#) | [GitHub](#) | [HuggingFace](#)

## Experience

- Research Assistant** **German Research Center for AI (DFKI)** *Germany* **07/2023 - now**
- Focus on supporting experiments for the [LT-Bridge](#) project, dedicated to advancing AI-related technology for low-resource languages
  - Built [GloVe embeddings](#) and retrofitted them with the ConceptNet graph knowledge for 70+ low-resource languages
  - Developed a methodology for [injecting graph knowledge](#) into multilingual LLMs via adapters for facilitating low-resource languages
  - Gathered 30+ [sentiment analysis datasets](#) along with the sources for testing word embeddings and multilingual LLMs
  - Trained and [fine-tuned LLMs](#) (mBERT, XLM-RoBERTa, Whisper) for Named Entity Recognition, Machine Translation, Speech-to-Text
- Language Manager** **YouFact LLC** *USA* **04/2017 - 04/2018**
- Worked for a technology marketing company producing videos on [YouTube](#) for 4+ million audience in 5+ languages
  - Analyzed AI-driven content creation platforms to enhance efficiency and productivity in content production
  - Managed workflow of 10+ freelance translators and voiceover artists ensuring the quality and consistency of translations and voiceovers
  - Edited audio for optimal quality using WavePad / Audacity (noise reduction, volume normalization, synchronization)

## Education

- Master of Science** **Saarland University** *Germany* **10/2022 - 12/2024**
- Major in Language Science and Technology (1.7/5.0, best: 1.0)
- Exchange Semester** **Murray State University** *USA* **08/2019 - 12/2019**
- Focus on Public Speaking, Web Design, Politics; Dean's List (3.75/4.0, best: 4.0)
- Bachelor of Arts** **Transnistrian State University** *Moldova* **09/2018 - 09/2022**
- Double Major in Linguistics and Pedagogy; Magna Cum Laude (4.9/5.0, best: 5.0)

## Publications

- KaLLM Workshop at ACL: [Adapting Multilingual LLMs to Low-Resource Languages with Knowledge Graphs via Adapters](#) (2024)
- Arxiv Preprint: [Multilingual Large Language Models and Curse of Multilinguality](#) (2024)

## Online Courses

- **HuggingFace:** [Computer Vision](#) & [Natural Language Processing](#) (CNNs; VisTransformers; CLIP; Diffusion Models; LLMs; Tokenizers)
- **Stanford University:** [Deep Learning Specialisation](#) (Supervised & Unsupervised ML; Recommenders; Reinforcement Learning)
- **Google Cloud:** [Large Language Models](#) (Attention Mechanism; Generative AI; Image Generation; Responsible AI)
- **Data Camp:** Statistical Analysis with R ([Intermediate R](#); [Hypothesis Testing](#); [Regression Models](#); [Bayesian Data Analysis](#))

## Projects

- [im2latex](#): Trained a base Vision Encoder-Decoder [Model](#) for converting images of mathematical formulas to LaTeX script
- [Pet Classifier](#): Fine-tuned [CLIP model](#) for pet classification and built a HuggingFace Spaces mini-app with Gradio
- [Mental Health in Literature](#): Created a HuggingFace Spaces [mini-app](#) for “diagnosing” literature characters with mental disorders
- [Vector Space Retrieval Model](#): Built a simple search engine using a TF-IDF vectorizing schema from scratch

## Awards

- **DAAD Fellow** - Pursuing graduate education in Germany through the [DAAD Scholarship](#) (Acceptance < 5%) **(10/2022 - 10/2024)**
- **Diamond Challenge Runner-up** - Represented a company creating eco-friendly toys at the [Entrepreneurship Contest](#) **(02/2020)**
- **Global UGRAD Fellow** - Served as an Ambassador of Moldovan culture at [WorldLearning Summit](#) (Acceptance < 3%) **(11/2019)**
- **Geography Olympiad Winner** - Achieved first place at the Republic [Geography Competition](#) (200 participants) **(04/2018)**

## Others

- **TaCoS Organization** - Attracted funding and helped with facilitation of Student Conference on Computational Linguistics **(05/2024)**
- **LT-Bridge Facilitation** - Facilitated Winter School on Low-Resource NLP and PEFT at German Research Center for AI **(03/2024)**
- **SciProS Participation** - #2 poster on multilingual LLMs of 25+ at Student Conference at Technical University of Kaiserslautern **(01/2024)**
- **Military Service** - Did an obligatory-by-state one-year military service with a three-month sergeant position **(08/2020 - 08/2021)**
- **American Spaces Volunteer** - Organized diverse events on American culture and advised on UGRAD applications **(01/2020 - 12/2021)**

## Skills

- Python | R | Java | HTML5 | CSS | Git | bash | Docker | LaTeX | VSCode | Jupyter | Cluster Computing | Praat | OverLeaf
- Scikit-Learn | PyTorch | TensorFlow | NumPy | Pandas | Matplotlib | Plotly | Transformers | NLTK | SpaCy | Gensim | Gradio
- Natural Language Processing | Computer Vision | Research & Development | Russian (*Native*), English (*Fluent*), German (*Intermediate*)