Taisiya Glushkova

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I am a ML/NLP engineer, broadly interested in LLMs, Evaluation, Interpretability and Uncertainty Estimation. I recently completed a PhD, where my doctoral research focused on enhancing the robustness of Machine Translation evaluation models and developing methods that can quantify and communicate the uncertainty associated with their outputs. This experience has refined my skills in developing complex ML systems and ensuring their robustness and fairness.

Driven by the ongoing advancements in AI, I thrive on exploring the latest ML/DL tools, taking ownership of projects, and contributing to impactful work across various domains.

Based in Lisbon, Portugal. Hold a valid Portuguese residency permit, allowing work authorization. Open to relocation if needed.

Education

PhD in Computer Science and Engineering, Instituto Superior Técnico Lisbon, Portugal Supervisors: André F. T. Martins, Chrysoula Zerva 2020 - 2024Thesis title: Uncertainty Estimation and Robustness in Machine Translation Evaluation Collaborative project MAIA (Multilingual AI Agent Assistants) - CMU Portugal Program partnership Collaborative project NextGenAl (Center for Responsible AI). MSc in Computer Science, HSE University 2018 - 2020BSc in Applied Mathematics and Computer Science, HSE University 2014 - 2018

Internships

Carnegie Mellon University Pittsburgh, USA Research. Robust and interpretable machine translation evaluation. Supervisor: Alon Lavie. 2022 **HSE** University Moscow, Russia Research. Question-answering for Russian language. 2019 - 2020Lisbon, Portugal Applied Al Research. Language model-based data filtering and selection for machine translation. 2019 **Yandex** Moscow, Russia Software Engineering. Classification and ranking of multiple object definitions by user relevance. 2015

Professional Experience

Instituto Superior Técnico Lisbon, Portugal PhD Researcher 2020 - 2024

- Worked on uncertainty estimation and robustness methods for efficient machine translation evaluation.
- Collaborated with the Unbabel research team on WMT Metrics and Quality Estimation shared tasks.

Digital Decisions Moscow, Russia ML Engineer 2019 - 2020

Implemented a hierarchical classification and routing system for customer messages at Vkusvill.

• Developed a named entity recognition model for speech assistant project at Huawei.

Diginetica Moscow, Russia

Junior Data Scientist/Engineer 2017

- Created a tool for generating concise summaries from product reviews.
- Developed a production-ready tool for spell-checking search queries and providing synonymous corrections.

Technical Skills

- Deep Learning, Machine Learning, Natural Language Processing.
- Fluent in Python, with minor experience with R and C++.
- Proficient with common data science libraries such as NumPy, pandas, matplotlib, scikit-learn, and HuggingFace.
- Comfortable with common data science tools, e.g. bash, git, Linux, slurm, Jupyter Notebook, and Google Colab.
- Experience with Deep Learning frameworks: PyTorch, Keras.

Selected Publications

Chrysoula Zerva, Taisiya Glushkova, Ricardo Rei, André F. T. Martins EMNLP 2022 Uncertainty-Aware Machine Translation Evaluation Taisiya Glushkova, Chrysoula Zerva, Ricardo Rei, André F. T. Martins Presented at the Sixth Conference on Machine Translation (WMT21) at EMNLP 2021 EMNLP Findings 2021 COMET-22: Unbabel-IST 2022 Submission for the Metrics Shared Task Ricardo Rei, José G. C. de Souza, Duarte Alves, Chrysoula Zerva, Ana C. Farinha, Taisiya Glushkova, Alon Lavie, Luisa Coheur, André F. T. Martins EMNLP WMT 2022; Second place on the WMT 2022 Metrics shared task CometKiwi: IST-Unbabel 2022 Submission for the Quality Estimation Shared Task Ricardo Rei, Marcos Treviso, Nuno M. Guerreiro, Chrysoula Zerva, Ana C. Farinha, Christine Maroti, José C. de Souza, Taisiya Glushkova, Alon Lavie, Luisa Coheur, André F. T. Martins EMNLP WMT 2022, Taisiya Glushkova, Alon Lavie, Luisa Coheur, André F. T. Martins EMNLP WMT 2022, Taisiya Glushkova, Alon Lavie, Luisa Coheur, André F. T. Martins EMNLP WMT 2022, Taisiya Glushkova, Alon Lavie, Luisa Coheur, André F. T. Martins EMNLP WMT 2022, Taisiya Glushkova, Alon Lavie, Luisa Coheur, André F. T. Martins EMNLP WMT 2021 Teaching Instituto Superior Técnico Lisbon, Portugal Taisiya Glushkova, Aloré F. T. Martins, Alon Lavie Moscor, Russia Lisbon, Portugal Teaching Assistant for Deep Learning course Disching Assistant for Python course University Projects Graduation Thesis (MSC), DaNetQA: a Dataset for Binary Question Answering in Russian 2019 – 2020 Coursework, Detecting Uncertain Information in Natural Language Texts Coursework, Collecting Dictionaries for Sentiment Analysis of Reviews Coursework, Collecting Dictionaries for Sentiment Analysis of Reviews Extracurricular Activities Extracurricular Activities Participated in a poster session at Center for Responsible Al Demo Day Mentored junior PhD students, providing guidance on research projects and academic writing Participated in a poster session at CMU Portugal 2022 Summit November 2022 Partic		
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