Maksim Shmalts

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- linkedin.com/in/maksim-shmalts github.com/maxschmaltz
- NLP / LLM engineer 5 years theoretical background plus practical expertise in NLP
- 3 years professional experience in the area Fast learner with advanced analytical skills

Education

- 2022- Karl Eberhards Universität Tübingen, Bachelor (in progress): Computational Linguistics
- 2024 (in progress) Bachelor thesis on splitting German compounds with LLMs (Python, LangChain, PyTorch, HF transformers)
 - 2024 Group project on investigating influence of RL fine-tuning data on biasing LLMs (Python, HF transformers)
 - 2023 Participated at the SemEval 2023 and published a paper at the ACL Anthology (Python, HF transformers)
- 2019- Lomonosov Moscow State University, Bachelor (incomplete): Theoretical and Applied Linguistics
- 2022 Personal project DERBI: a tool for automatic inflection of German words (Python)
 - 2022 Conference diploma for DERBI at Lomonosov-2022 (Moscow), Science Sessions-2022 (Kaliningrad), XXII International Conference of Young Slavists (Tallinn)
 - 2021 Term paper on predicting ablaut class of German strong verbs (Python, PyTorch)
- 2017- Lomonosov Moscow State University Gymnasium, High School: History and Philology
- 2019 Prize-winner of All-Russian Olympiad for Linguistics (gives no-exam admission to the university of choice)
 - 2019 Graduation with a Gold Medal

Work Experience

2024

- 2023- Working Student for LLMs, IAV GmbH
 - Implemented and integrated a tool for evaluation of LLMs and RAG pipelines (Python, LangChain, Ragas, OpenAI)
 - Currently, testing applicability of RAG Engines for internal usage (Python, LangChain, RAGFlow, Canopy, Verba)
- 2021- Data Scientist / NLP Engineer, MKSKOM
- Contributed into creating a custom Retrieval-Augmented Generation Engine for a large customer (Python, LangChain, Llama.cpp, HF Transformers)
 - Increased the number of responses from potential customers on a freelance platform by 5 times by independently designing and implementing an LLM-based tool for automatic search and contacting potential customers (Python, LangChain, OpenAI, Puzzle [internal tool])
 - Implemented tools for Natural Language Processing, Time Series Prediction, Optimization Modeling, Data Analysis (Python, PyTorch, spaCy, scikit-learn, statsmodels, Pandas, NumPy, streamlit)
 - Participated in hackathons for RL and Anomaly Prediction (Python, scikit-learn, statsmodels)
 - Communicated with potential customers
- 2022- Student Assistant, Tutor (Various Courses), Karl Eberhards Universität Tübingen
- Created Finite-States Transducers for measuring distance between German dialects for the course "String Algorithms" (Python, pynini)
 - Contributed into holding lectures, prepared and evaluated assignments for courses "Python for Beginners", "Statistical Language Processing II", "String Algorithms"
- 2021- Assessor, Yandex
- Evaluated search engine results on IT-themed queries, evaluated machine translations
- 2021- Course Instructor ("Linguistics for Olympiades"), Lomonosov Moscow State University Gymnasium
- Held lectures, prepared and evaluated assignments for the Course "Linguistics for Olympiads"

Publications

John Boy Walton at SemEval-2023 Task 5: An Ensemble Approach to Spoiler Classification and Retrieval for Clickbait Spoiling, ACL Anthology, Toronto

The paper summarizes my approach to the SemEval-2023 Task 5 that uses an ensemble of encoder and seq-to-seq Transformer-based LMs.

2022 Derbi: Deutscher regelbasierter Inflektor, Studia Slavica XX, Tallinn (issued 2024) & DERBI: DEutscher RegelBasierter Inflektor, Faktor14, Tübingen

The papers give a brief overview on DERBI, my model for automatic inflection in German.

Facts

Natural languages	Russian (native), English (C1), German (B2), Spanish (A2)

Programming languages Python, R, C#, Java

Tech stack LangChain, HF Transformers, spaCy, PyTorch, scikit-learn, Pandas, NumPy;

Docker, GitLab (CI/CD), Unix tools

Misc achievements Prize winner for various national and international music competitions, driving license categories

A and B, startup founder (now closed)

Interests Music, sports (in particular, kickboxing, table tennis, volleyball), history, philosophy, traveling