

Master's Student Position: Evaluation of Retrieval-Augmented Generation (RAG) Models

TU Wien, Research Unit Data Science, Institute of Information Systems Engineering

Project Context

The Data Science Research Unit at TU Wien is seeking a highly motivated Master's student to contribute to the "Agentic RAG in Open Tender Evaluations" project, specifically focusing on the evaluation of Retrieval-Augmented Generation (RAG) AI models. This work will be conducted in cooperation with industry partners skale.dev and the City of Vienna.

This project aims to develop and validate novel evaluation methods for RAG-based AI models used in the analysis and interpretation of complex documents, particularly within public tender procedures. The goal is to establish a robust methodological foundation for reliably assessing and further developing the performance of such RAG models in a practical application context. This includes defining suitable quality metrics (e.g., relevance, factual accuracy, completeness, and contextual understanding) to prevent hallucinations and investigating different model architectures and configurations.

Your Focus

You will contribute to the development and implementation of a test framework for evaluating RAG model responses in the tendering environment. In close collaboration with the project team, your tasks will include:

- Supporting the analysis of technical and functional requirements for RAG-AI models in the context of public tenders.
- Assisting in the development and implementation of a prototypical RAG pipeline tailored for analyzing tender documents.
- Investigating state-of-the-art, domain-specific evaluation methods for RAG models.
- Helping measure and document response quality using predefined metrics, ensuring traceability and robustness of results.
- Contributing to the development of prototypes demonstrating the most successful approaches and configurations.

Your Profile

We are looking for a candidate with the following qualifications:

- Enrolled in a relevant Master's study program in the field of Informatics, Business Informatics, Data Science, or a closely related field.
- Strong programming knowledge, preferably in Python and experience with data processing and analysis.
- Interest in Natural Language Processing (NLP) techniques, and Large Language Models (LLMs) as well as AI-driven document analysis and evaluation methodologies.
- Ability to work independently and precisely, with strong team and communication skills.

We Offer

- The opportunity to conduct research towards a Master's thesis as part of this employment.
- A creative and collaborative environment within one of Europe's most livable cities.
- Continuing personal and professional education and flexible working hours.
- Central workplace location with excellent accessibility.
- Entry-level salary determined by the pay grade C of the Austrian collective agreement for university staff (minimum of currently EUR 674,80/month gross for 10 hours/week, 14 times/year). The employment period is expected to be from September 2025 to May 2026.

How to Apply (by August 25th, 2025)

Send a single PDF to: `recsys-lab[at]ec.tuwien.ac.at`, including:

- Motivation letter (1 page)
- CV
- Academic transcripts
- (Optional) Link to code samples or GitHub, past and/or current projects

We look forward to your application by August 25th, 2025!