

Graduate Research Assistantship at the School of Information Sciences – NLP (50% RA, Spring 2026)

The ScienceNLP Lab at the School of Information Sciences (iSchool) is seeking a Graduate Research Assistant (50%) with expertise in natural language processing/text mining (NLP), artificial intelligence/machine learning (AI/ML), and data science and interest in scholarly communications and healthcare. The RA will work under the supervision of Dr. Halil Kilicoglu on the project *Improving Results and Conclusions about Harms in Systematic Reviews of Drugs* funded by the Agency for Healthcare Research and Quality (AHRQ). The position may be extended into the summer and beyond based on performance.

Project Description: Systematic reviews (SRs) have been described as the highest level of evidence on drug effects and play a critical role in patient safety concerns. However, many SRs are designed to assess intervention benefits, and emerging evidence suggests that conclusions about harms in SRs might not be trustworthy. This study uses NLP/AI methods to examine whether: information about safety in SRs of drugs is reliable; SRs are consistent with safety information on drug labels; and SRs address safety concerns identified in real-world evidence.

Duties include:

- NLP/AI literature review and research
- Development and validation of robust NLP/AI models
- Biomedical literature data curation, management, and analysis (PubMed, PMC, etc.)
- Adaptation and management of annotation tools (INCEPTION, etc.)
- Collaboration with domain experts
- Contribution to scientific publications

Required qualifications:

- Enrollment in a PhD program (or exceptional MS student with relevant research experience) in Information Science, Informatics, Computer Science, Engineering, Statistics, Linguistics, or a related field
- Strong foundation in NLP/AI methods and desire to learn more
- Strong Python programming and math/statistics skills
- Demonstrated experience with large language models (LLMs) and NLP/AI frameworks such as PyTorch and HuggingFace
- Experience with training/validating ML models on HPC infrastructure
- Excellent communications skills in written and spoken English
- Excellent analytical/critical thinking skills
- Effective time management skills, attention to detail

Preferred qualifications:

- Publication record in NLP, AI/ML, biomedical informatics, or related fields
- Experience working in multidisciplinary teams
- Interest in topics such as science of science, evidence synthesis, reproducibility

Interested candidates should send their CV/resume and a short statement of interest to Halil Kilicoglu (halil@illinois.edu). Review of applications will begin immediately. Applications will be accepted until the position is filled.