

Graduate Research Assistantship at the School of Information Sciences – NLP (25% RA, Spring 2026)

The ScienceNLP Lab at the School of Information Sciences (iSchool) is seeking a Graduate Research Assistant (25%) 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 NIH-funded project *COMBINI: connecting complementary medicine evidence and biological knowledge to support integrative health*. The position may be extended into the summer and beyond based on performance.

Project Description: Complementary medicine interventions (e.g., dietary supplements, yoga, acupuncture) are increasingly used by health care consumers, although much remains poorly understood about their effectiveness and safety as well as the underlying biological mechanisms through which they affect health and well-being. Much of the scientific evidence on complementary interventions remains in unstructured text in specialty journals, creating barriers for its effective integration with conventional medicine. This project develops informatics resources (ontology, corpora, knowledge graphs) and literature mining tools to consolidate the high-quality evidence on complementary medicine approaches and integrate it with conventional medicine in a machine-readable and AI-ready form.

Duties include:

- Literature review and research in NLP/AI and knowledge graphs
- Development and validation of robust NLP/AI models and knowledge graphs
- Biomedical data curation, management, and analysis (scientific publications, knowledge bases)
- 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 with knowledge graph methodologies
- Experience working in multidisciplinary teams

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.