UNIVERSITY OF SOUTHERN MAINE
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Graduate Assistantship Job Description

Position Summary:

Title: Research Assistant
Department: Computer Science
Hours per Week: 10 hours/week

Location(s): Portland
Lab (if applicable): AIIR Lab
Duration: Fall 2026 semester, Spring 2027 semester
Anticipated Start Date: 9/1/2026

Total Stipend: $6,000 for master's-level students / $7,000 for doctoral-level students, to be paid biweekly
Tuition Waiver: 3 graduate credits during each of the Fall 2026 semester, Spring 2027 semester

Supervisor Name: Behrooz Mansouri
Supervisor Email: behrooz.mansouri@maine.edu
Supervisor Phone: 207-780-4240

*** Per CBA, Art. 38, § 7, graduate workers who are on approved remote work arrangement may need to physically come to campus periodically to perform work or attend meetings. Check with the supervisor for any on-campus requirements.*

Other Information:

- The University offers a GA/TA/RA health benefit plan to USM graduate workers through Gallagher Health. Additionally, effective July 1, 2026, workers have access to dental and vision insurance options and voluntary retirement savings plans; USM will not cover these costs.
- Graduate workers are also eligible for resources through the UMS Employee Assistance Program (EAP).

Position Details:

Statement of Job:

This position supports a research project focused on developing artificial intelligence tools that improve public access to legal information. The Research Assistant will contribute to building systems that allow non-expert users to search and understand U.S. legal cases using natural language queries and simplified explanations. The role involves working with large-scale legal text collections, information retrieval models, and machine learning methods to bridge the gap between complex legal language and everyday language. This work advances the research mission of the Computer Science program by contributing to scholarship in natural language processing, artificial intelligence, and information retrieval. The position also supports the department's professional standards by promoting reproducible research, open datasets, and the development of tools that can be used in both research and educational contexts.

Essential Functions:

The Research Assistant will develop data pipelines to collect, clean, and organize large collections of legal case documents from publicly available sources such as case.law. They will assist in designing and evaluating domain-specific search and retrieval systems that enable users to search legal cases using informal natural language queries. The position includes implementing machine learning models for tasks such as question answering, long-document summarization, and controlled text simplification in the legal domain. The assistant will conduct experiments, evaluate system performance using established metrics, and maintain well-documented research code and datasets. Additional responsibilities include supporting

research publications, preparing technical documentation, and assisting with presentations of research findings.

Supervisory Responsibilities:
The assistant provides guidance on tasks such as data preparation, experiment setup, and research coding practices. They may also help coordinate shared workflows and maintain documentation for project datasets and software tools.

Budget Responsibilities:
The Research Assistant will not have direct responsibility for managing project budgets. However, the assistant will support responsible use of project resources, including computational infrastructure, data storage, and software tools used in the research project.

Public and Professional Activities Related to Job Performance:
The Research Assistant may participate in scholarly activities related to the research project, including assisting with the preparation of research papers, technical reports, and presentations. The assistant may contribute to presenting research findings at departmental seminars, workshops, or academic conferences in artificial intelligence and natural language processing. They may also help develop open datasets, research tools, or experimental benchmarks that support the broader research community. Participation in these activities helps disseminate research findings and promotes engagement with the academic and professional community. These efforts also support the professional development of the research team and contribute to the visibility of the department's research activities.

Internal Contacts:
Behrooz Mansouri

External Contacts:
NA

Knowledge, Skills, and Abilities:
The position requires knowledge of natural language processing, machine learning, and information retrieval methods. Strong programming skills in Python and experience working with text processing libraries or machine learning frameworks are important. The assistant should be able to work with large datasets and design computational experiments to evaluate system performance. Strong analytical and problem-solving abilities are necessary to implement and test new research ideas. The ability to clearly document code, experiments, and research findings is also essential.

Required Qualifications:
- Applicants should have experience with Python programming and familiarity with basic machine learning concepts. Experience working with text data and natural language processing techniques is required. Candidates must demonstrate the ability to work independently on research tasks and collaborate effectively within a research team. Strong written communication skills are also required for documenting research results and preparing reports.
- Must not be a non-student University of Maine System employee.
- The hiring department has a computer that will be made available to the student, so the use of a personal computer or laptop IS NOT required for this position. Note: designated on-campus computer lab workstations are available on a first come, first served basis.

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Preferred Qualifications:

- Preference will be given to candidates with experience in natural language processing, information retrieval, or large language models. Familiarity with machine learning frameworks such as PyTorch, TensorFlow, or Hugging Face Transformers is desirable. Experience working with large-scale text datasets or developing search and question-answering systems is beneficial. Prior involvement in academic research projects or publications in artificial intelligence or computational linguistics is also preferred. Knowledge of legal text analysis or domain-specific NLP applications would be an additional advantage.
- Suggested academic programs: Computer Science

This position shall be covered by the University of Maine System and University of Maine Graduate Workers Union Collective Bargaining Agreement.

To Apply:

Submit your application, including your resume and cover letter, via the Graduate Assistant Application form linked here by 4/17/2026. In your cover letter, include a self-assessment about how this position relates to your academic program and professional aspirations. Candidates should receive notice of employment decisions by 5/31/2026.

Please direct any questions specific to this position to the supervisor at behrooz.mansouri@maine.edu or 207-780-4240. For general questions about the GA program, or the Graduate Assistant Application form, reach out to the Office of Graduate Studies, usmgradstudies@maine.edu or 207-780-4872.