

The Information Sciences Institute (ISI), part of the world-renowned Viterbi School of Engineering at USC, is home to nearly 350 researchers in a variety of fields, including intelligent systems and artificial intelligence, who carry out world-class research in a collaborative, academic environment. ISI scientists have the opportunity to spend the majority of their time doing the research they love. Projects are critically accelerated by research programmers and Ph.D. and M.S. students. USC operates one of the world's largest academic high-performance computing clusters. ISI has three research campuses: one in Marina Del Rey, CA; one in Arlington, VA; and one in Waltham, MA.

The Artificial Intelligence Division of Information Sciences Institute (<https://www.isi.edu/ai/>) seeks a Research Computer Scientist.

JOB ACCOUNTABILITIES:

- Serves as key research scientist and authority in specialized field(s) of expertise. Demonstrates thought leadership and independence in conceptualizing, planning, designing, conducting and driving complex research projects. Exercises significant judgment in determining scientific objectives and approaches. Plans and pursues long-term goals and objectives independently or in collaboration with others, as appropriate.
- Identifies, researches and evaluates data sources, background information and technology related to specialized area(s). Generates research ideas and designs algorithms, software and/or hardware. Contributes state-of-the-art technology and theories, and applies scientific principles and concepts in the planning, coordinating and execution of research objectives.
- Solves a wide range of complex research problems effectively, creating or modifying techniques to obtain solutions. Selects approaches for designing experiments whose results are often reviewed by research sponsors and develops documentation to determine whether results are of sufficient impact to warrant publication.
- Writes scientific articles for publication, independently or in teams, and technical reports and papers that demonstrate thought leadership and innovative thinking. Makes presentations at conferences, participates in workshops and collaborates in specific research areas. Represents the university/institute, as appropriate, and networks with professional counterparts inside and outside USC.
- Participates in supervision of the research of PhD students, and screens, interviews and evaluates applicants for research positions. May schedule and assign work, and oversee quality by training, reviewing or critiquing work. Provides leadership, direction and guidance to staff, graduate research assistants and/or student workers in areas of expertise and regarding protocols, procedures, policies and equipment, as needed.
- Stays abreast of new developments and technologies by reading technical journals and other pertinent publications, maintaining contact with vendors, and participating in professional organizations, meetings and seminars.
- Contributes ideas to and participates in the writing of proposals to agencies and organizations that fund sponsored research. May participate in proposal review panels organized by research-funding organizations.

- Maintains awareness and knowledge of current changes within legal, regulatory, and technology environments which may affect operations. Ensures senior management and staff are informed of any changes and updates in a timely manner. Establishes and maintains appropriate network of professional contacts. Maintains membership in appropriate professional organizations and publications. Attends meetings, seminars and conferences and maintains continuity of any required or desirable certifications, if applicable.

ISI welcomes applications from research computer scientists in any of the following areas:

- Machine Learning and Applications
- Natural Language Processing
- Knowledge Graphs
- Scientific Data Analysis and Discovery
- Multi-modal Understanding
- Common Sense Representation and Reasoning
- Computational Social Science
- AI Robustness
- Auditing AI
- AI Fairness

PREFERRED QUALIFICATIONS

- Ph.D. in Computer Science
- Record of publishing in premier AI conferences
- Proven ability to write proposals and win sponsored contracts and grants

The University of Southern California values diversity and is committed to equal opportunity in employment.

Minimum Education: Doctorate

Minimum Experience: 0-6 months

Minimum Field of Expertise: PhD with demonstrated record of outstanding research contributions and experience. Proven technical proficiency, exceptional creativity, successful collaboration with others, and independent thought. Strong managerial skills. Demonstrated reputation as an emerging leader in field with sustained performance and accomplishment. Demonstrated ability to conceptualize research directions, exert technical leadership, communicate technical ideas, coordinate individual contributions to a research program, and present research plans and results in a manner that will elicit favorable funding actions.