



معهد قطر لبحوث الحوسبة  
Qatar Computing Research Institute

عضو في مؤسسة قطر  
Member of Qatar Foundation

## **Scientist- Arabic Language Technologies**

Qatar Computing Research Institute (QCRI) is seeking candidates for Scientist to work within the [Arabic Language Technologies](#) team. We offer unique opportunities for strong careers spanning basic and applied research in the areas of language technologies, including Natural Language Processing and Information Retrieval with particular emphasis on Language Understanding and Machine Translation.

The research of the ALT team focuses on the following areas:

- Information Extraction and Retrieval based on deep linguistic analysis and natural language comprehension. This includes developing a flexible pipeline of NLP and IR components that can be used to build and deploy state-of-the-art systems such as question answering, textual entailment, paraphrasing, and summarization, among others.
- Multilingual speech and text processing, which includes speech recognition (especially for Arabic and its dialects, and English) and machine translation, with applications such as lecture translation, translation for medical and tourist domains, and supportive tools for professional translators and interpreters.
- Optical character recognition for historic documents, especially for Arabic heritage material.
- NLP/IT for education, in particular the development of an Arabic e-book reader and explorations in computer assisted language learning.

ALT bases its research on empirical and machine learning-based approaches, focusing on aspects such as robustness, portability, adaptation and multilinguality (making progress in parallel in English and Arabic).

Knowledge of Arabic is not required but is considered a plus. Having background in any of the following topics related to machine learning is valued as well:

*Discriminative learning, including SVMs and other max-margin approaches | Graphical models | Structure learning for sequence tagging, segmentation, parsing, etc. | Advanced data representation through kernel methods and kernel machines | Online learning and active learning | Semi-/Weakly-/Un-supervised learning | Domain adaptation, multi-task and transfer learning in NLP | Relational learning | Clustering approaches | Language modelling: factored, continuous space LMs*

QCRI strives to become the regional and global leader in Arabic language technologies – in the areas of search, information retrieval and analysis, multilingual language processing, advanced machine translation and also leading efforts to increase and enrich Arabic language content online.

### **Job Description:**

- Scientists work as part of a research team, collaborating with peer researchers and software engineers. They are expected to publish high quality papers, develop prototypes, and generate intellectual property in the form of disclosures and patent applications.
- Scientists will contribute to the development of speech translation to and from Arabic, including dialectal Arabic. Targeted applications include broadcast news, lecture translation, automatic conference and meeting interpretation, and limited domain dialog systems, esp. for medical domain.
- Scientists who are part of the QCRI MT team collaborate with the Translation and Interpretation Institute in the development of innovative approaches to computer assisted translation.

### **Education and requirements:**

- PhD in computer science or a related field from a top-tier institution; should have at least one year of post-PhD research.

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- A strong record of major accomplishments
- Strong publication record in tier 1 conferences and journals. Contributions to the community in the form of reviewing, mentoring students, organizing workshops and tutorials
- The candidate must be a mature scientist with both theoretical and applied skills
- Strong communication and collaboration skills
- Must be fluent in English

**Research at QCRI:**

[QCRI](#) supports Qatar Foundation's mission by helping to build Qatar's innovation and technology capacity. It is focused on tackling large-scale computing challenges that address national priorities for growth and development. Moreover, QCRI is a national research institute conducting world-class applied computing research that transforms the way we interact with each other, enables new discoveries, and accelerates development of society.

A proud member of [Qatar Foundation for Education, Science and Community Development](#), QCRI is building a multidisciplinary research group in computer science with passion for innovation and excellence in research. The QCRI research program offers a collaborative, multidisciplinary team environment, endowed with a comprehensive support infrastructure.

**Research in Qatar:**

Qatar has made a commitment to be a leading center for research and development excellence and innovation. Home to a globally regarded scientific research funding organization, a world-class hub for technology innovation and commercialization, and prominent research institutes operating at the frontiers of science, Qatar Foundation Research and Development is spearheading a national endeavor to fulfill this commitment.

The country is home to branch campuses of numerous world-renowned universities such as Carnegie Mellon University, Texas A&M University and Georgetown University, major oil and gas companies, telecommunication companies, and international media organizations such as Al Jazeera. These local institutions offer opportunities for research collaboration to tackle new computing research challenges of practical importance.

**Package:**

*QCRI offers a unique opportunity for strong research careers and a highly competitive compensation package including attractive tax-free salary and additional benefits such as furnished accommodation, excellent medical insurance, annual paid leave, and more.*

*To apply, please [click here](#) and select "Scientist – Arabic Language Technologies" Positions are open until filled. Please note that due to the high volume of applications, only short-listed candidates will be contacted.*

