Postdoctoral Research Fellow/Senior Research Assistant
in AI for Environmental Impact Assessment i
Qatar University

Job Title	Postdoctoral Research Fellow/Senior Research Assistant in AI for Environmental Impact Assessment i
Department	College of Engineering
Institution	Qatar University
	Doha, Qatar, Qatar
Date Posted	Mar. 4, 2024
Application Deadline	Mar. 31, 2024
Position Start Date	Available Immediately
Job Categories	Post-Doc
Academic Field(s)	Sustainable Engineering
	Industrial & Systems Engineering
	Ecological and Environmental
	Computer Science
	Engineering - Other

Apply By Email

Job Description

A postdoctoral research fellow/Senior Researcher position is available at Qatar University on a project aimed at developing an AI-integrated life cycle assessment (LCA) framework to evaluate the environmental impacts of dairy production in Qatar. This multidisciplinary project brings together experts in industrial engineering, environmental sciences, and computer science.

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The postdoctoral research fellow/Senior Researcher will play a key role in integrating artificial intelligence (AI) techniques into a hybrid LCA framework to enhance the accuracy and efficiency of quantifying environmental impacts associated with dairy production.

Responsibilities:

- Conduct an extensive literature review on relevant AI methods such as machine learning and deep learning algorithms that can be applied for environmental modeling and life cycle assessment.
- Research and evaluate appropriate AI architectures and models to effectively capture complex relationships between dairy production systems parameters and resulting environmental impacts.
- Lead the development of AI algorithms, data preprocessing pipelines, model training code, and workflows to integrate advanced AI capabilities into the hybrid LCA framework.
- Write manuscripts for publication in peer-reviewed journals and technical reports summarizing research completed.
- Present research findings at academic conferences and project meetings
- Provide guidance to graduate students involved in the project.

Qualifications:

- PhD/Master in Computer Science, Environmental Engineering, Industrial Engineering or a related field. Postdoctoral researcher must hold a Ph.D. degree, while Senior Research Assistant must have a master's degree.
- Demonstrated expertise in AI/ML through coursework, research or industrial projects, or publications.
- Strong programming skills in Python.
- Experience applying AI to address sustainability challenges is highly desirable.
- Excellent written and verbal communication skills.
- Ability to work collaboratively in an interdisciplinary team environment.

College/Department Profile:

Qatar University Profile

Qatar University is the premier national institution of higher education in the country and, consequently, enjoys the enthusiastic support of its government and citizens. With vibrant undergraduate and

emerging graduate programs, the University offers the widest array of academic and community outreach programs and research related to national needs and priorities. Qatar University has an international faculty dedicated to the education of its 15,000+ students and, increasingly, to building strong graduate programs and research capabilities with emphasis on addressing national and regional needs and priorities. The University is located in Doha, Qatar, a vibrant modern city that welcomes visitors and residents from around the globe.

Qatar University is based in Doha, Qatar, and the selected applicant is expected to be based there. Qatar University is a leading research institution in the Middle East, with 10 interdisciplinary research centers, over 133 research collaborations with leading institutions across the world.

For more on Qatar University, please visit http://www.qu.edu.qa/For more on Qatar Transportation and Traffic Safety Center, please visit http://qttsc.qu.edu.qa/. For more on Doha, Qatar, please visit http://www.qatartourism.gov.qa/

College Profile

Established in 1980, the College of Engineering offers degree programs in the fields of Architectural, Chemical, Civil, Electrical, Mechanical, Industrial and Systems, Computer Science and Computer Engineering with the primary goal of preparing Qatari engineers with outstanding scientific and technical competencies to enable them to participate and contribute in the various aspects of the country.

Qatar Transportation and Traffic Safety Center (QTTSC)

QTTSC was established in 2012 as a research entity in the State of Qatar that provides guidance and consultation to improve the safety, efficiency and sustainability of transportation and traffic for Qatar with a global presence. It fulfills the role of the university to advance knowledge and contribute to the needs and aspiration of the society with regards to the field of transportation.

Salary and Benefits

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Postdoctoral Researcher

- Housing allowance QR 7,000.
- Annual economy air ticket allowance to the home country as per quotation from Qatar Airways for the employee, accompanying spouse and up to two children (under 18 years of age) "similar to QU HR policy for academic staff"
- Annual paid vacation for 35 calendar days. Permission for vacation will be given in accordance with work needs in the research project.
- Education allowance for one "accompanying" child from grade one up to 18 years of age. The entitlement is not exceeding QR 45,000 per year per child "similar to QU HR policy for academic staff".
- Health insurance for the employee accompanying spouse and up to two children (under 18 years of age) "similar to QU HR policy for academic staff".
- Monthly salary of QR 17,000 that incorporates:
    - Basic monthly salary QR 16,000
    - Transportation allowance QR1,000

Senior Research Assistant

- Single shared furnished accommodation or housing allowance QR 5,000 for single/QR 6,000 for married (utilities are at the employee's expense).
- Annual economy air ticket allowance to the home country as per quotation from Qatar Airways for the employee, accompanying spouse and up to two children (under 18 years of age) "similar to QU HR policy for academic staff."
- Annual paid vacation for 35 calendar days. Permission for vacation will be given in accordance with work needs in the research project.
- Health insurance for the employee accompanying spouse and up to two children (under 18 years of age) "similar to QU HR policy for academic staff".
- Monthly tax-free salary of QR 12,000 that incorporates:
    - Basic monthly salary QR 11,000
    - Transportation allowance QR 1,000

Research Assistant

- Housing allowance QR 5,000.
- Annual economy air ticket allowance to the home country as per quotation from Qatar Airways for the RA only.

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- Annual paid vacation for 35 calendar days. Permission for vacation will be given in accordance with work needs in the research project.
- Health insurance for Research Assistance only
- Up to 5% annual increment
- Monthly salary range from QR 7,000 to QR 9,000 that incorporates:
- Basic monthly salary from QR 6,500 to QR 8,500 (B.Sc. holder or M.Sc. holder) Transportation allowance QR 500

How to apply

Required Documents:

- Cover letter (Please indicate the level of the position you apply: Postdoctoral Researcher, Senior Research Assistant, Research Assistant)
- Curriculum Vitae
- Any additional documentation that you feel is relevant to your application.

How to Apply:

Please zip the application materials in a single file (or combine in a single .pdf) and email it to Dr. Nuri Onat at onat@qu.edu.qa

The deadline for the applications is 31st of March 2024. The position is available immediately but start date must be latest by 1st of August 2024. The position is for minimum 2 years with renewable contract.

EEO/AA Policy

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Qatar University is committed to the belief that diversity is one of the institution's greatest strengths as an intellectual community, that represents a key for educational success and excellence. A campus that embraces diversity, equity, and inclusion enhances the experience for every member in the University in either the learning or working environment. Qatar University considers diversity as one of Core Values of the University in achieving its vision and mission, as it embraces diversity that respects religious and cultural tenants, and considers a diverse faculty and student body a source of strength that enriches its educational and work environment.

In seeking to achieve a diverse, equal and inclusive environment, Qatar University embraces a diverse population of students, faculty, and staff, of all nationalities, cultures, colors, religions, and different age groups, and prohibits any form of discrimination against any of its members in teaching, learning, research or any services provided by the University. The University is committed to providing equal opportunities and ensuring every individual is treated fairly without regard to race, gender, nationality, age, disability, religion, political belief or social origins. The University is also committed to ensure that existing members as well as applicants for either employment or admission are treated on an equal basis and judged solely by reference to their qualifications, abilities, and skills, based on the legislations in the approved and effective bylaws and policies.

This webpage highlights the University's efforts and practices towards achieving a sustainable environment that is committed to providing Diversity, Equity, and Inclusion to all members.

Contact Information

Please reference Academickeys in your cover letter when applying for or inquiring about this job announcement.

Contact   Nuri Onat
College of Engineering
Qatar University
PO Box 2713
Doha, Qatar
Qatar

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Contact E-mail   onat@qu.edu.qa