

# Postdoctoral Position in Driven Data Machine Learning for Geotechnical Engineering Applications.

Institution:	Prince Sultan University
Location:	Riyadh, Saudi Arabia
Category:	<a href="#">Driven Data Machine Learning</a>
Posted:	Novmeber 20, 2022
Application Due:	Open Until Filled
Type:	Full-Time

The Structures and Materials Research (S&M) Lab at Prince Sultan University is seeking a talented postdoctoral researcher in the field of Software development, Machine Learning, and Data Science in a research area focused on computational and prediction models.

## About S&M Research Lab

The Structures and Materials Research Lab (S&M Lab) was established with the aim of promoting the scientific research environment at PSU through national and international collaborations with industrial and academic partners in multidisciplinary areas related to structural engineering, materials, composites, and geotechnical and transportation engineering.

The lab has a wealth of distinguished full-time researchers and talented research assistants. The main objective of the S&M Lab is to conduct scientific research, develop training programs, and attract external funds related to the four main areas of research.

Despite the short period of time since the inception of the S&M Lab, the lab team demonstrated its productivity through publishing their research works in several refereed scientific journals, actively participating in conferences, offering several training programs, and securing internal and external funding for their projects. They also contributed to several research projects that aspire to solve complex social and engineering problems that are critical to structures and industry.

The lab team was successful in attracting several key collaborations, including; Saudi Aramco (KSA), American Society of Civil Engineers (ASCE), Deltares Research Firm (Netherland), Queen's University Belfast (UK), University of Limerick (Ireland), King Abdullah University of Science and Technology (KSA), and United Arab Emirates University (UAE).

## Responsibilities

- Perform research to advance the science and technology of intelligent machines.
- Collaborate with the supervisor and other researchers to discuss, develop and implement the research agenda.
- Write and debug high-quality research code and research papers.
- Design and implement experiments to test research ideas on a variety of problems.
- High-quality papers and present research at conferences.

## Requirements:

### A. Minimum Qualifications

- Currently has or is in the process of obtaining a Ph.D. degree or completing a postdoctoral assignment in Computer Science or a similar field. The degree must be completed prior to joining S&M Lab.
- Experience coding in C/C++, Python, C#, or other similar languages.
- Research background in Machine Learning, Natural Language Processing, Computer Vision, prediction models, data science, software development, or a similar field.
- Experience solving analytical problems using analytic and quantitative approaches.
- Experience machine learning research.

## B. Preferred Qualifications

- General background in Geotechnical and Transportation Engineering is preferred.
- First-authored publications at peer-reviewed journal papers.
- Research and engineering experience demonstrated via grants, fellowships, patents, internships, work experience, and/or coding competitions.
- Experience solving complex problems and comparing alternative solutions, trade-offs, and diverse points of view to determine a path forward.
- Experience communicating research for public audiences of peers.
- High-level written and oral communication skills with the ability to represent the research team at national and international conferences

### Position details and benefits:

- The employment will be based on a one-year contract renewable upon mutual agreement.
- PSU offers a competitive salary besides housing, health insurance, and yearly round-trip tickets.

For additional position details, benefits, and requirements, please refer to <https://ric.psu.edu.sa/postdoc-researcher-program.php>

## Application Instructions

Application should include

- [1] Single Page Cover letter including a description of your research experience and your research interests
- [2] CV including a list of publications
- [3] Copy of official academic transcripts
- [4] Three letters of reference

To apply, send the following documents in **one PDF file** by email to [mezzat@psu.edu.sa](mailto:mezzat@psu.edu.sa)

## Other information

The starting date is flexible. Please indicate the approximate starting date.

**For further details about the position, please contact Dr. Mohamed Ezzat ([mezzat@psu.edu.sa](mailto:mezzat@psu.edu.sa))**