# Texas A&M Institute of Data Science Postdoctoral Fellowship in Materials Data Science.

#### Description

The Texas A&M Departments of Electrical & Computer Engineering (ECE) and Materials Science & Engineering (MSE), in conjunction with the Texas A&M Institute of Data Science (TAMIDS: <u>https://tamids.tamu.edu/</u>), is recruiting a postdoctoral researcher in the area of **Materials Data Science.** The specific research topic involves model and algorithm development for physics-principled machine learning and experimental design to accelerate materials discovery.

In addition to conducting research in machine learning and its materials science applications, the postdoctoral fellow will engage with the broader mission of TAMIDS for one day per week on average. Examples of such engagements include: creating and teaching a short course related to their research, advising graduate student interdisciplinary Data Science team projects, or consulting or collaborating with researchers or graduate students in their area to help integrate Data Science into their projects.

Interested candidates please send a cover letter with research interests, curriculum vita, one representative publication, and a list of 3 reference contacts to Profs. Xiaoning Qian (xqian@ece.tamu.edu) in ECE and Raymundo Arróyave (raymundo.arroyave@tamu.edu) in MSE at Texas A&M University.

## Qualification

The candidates should have Ph.D. in engineering, computer science, applied mathematics, operations research, computational chemistry, computational biophysics, or other related fields, with a publication track record. Algorithm development experience in the following areas is highly preferred: optimization, machine learning, Bayesian methods, probabilistic graphical models, systems and control theory, and/or statistics (three of the six). The candidates should have a fundamental understanding of basic machine learning and Bayesian methods as well as hands-on experience of implementing signal processing, data analysis, and statistical learning methods in real-world applications. Knowledge of probability theory and estimation theory is necessary. Familiarity with MATLAB, C(or C++), and Python programming (two of the three) is necessary. Physics and chemistry training related to materials science is a plus.

#### **Start Date**

As soon as possible.

# How to Apply

Interested candidates please send a cover letter with research interests, curriculum vita, one representative publication, and a list of 3 reference contacts to <u>xqian@ece.tamu.edu</u> and <u>raymundo.arroyave@tamu.edu</u>.