Graduate Assistantship on Machine Learning Multiscale Mechanics

A Research/Teaching Assistant position is available in the Smart Multiscale Mechanics lab (SMML). The mission of the SMML is to develop efficient yet accurate computational methods and tools for manufacturing, design, and analysis of advanced materials and structures. Visit https://xinliugroup.uta.edu/ for more details about the lab.

The research assistant will develop physics-informed/constrained machine learning models for computational mechanics problems with the application to fiber-reinforced composites, 3D printed lattice metamaterials, and smart materials. A bachelor's degree in mechanical engineering, aerospace engineering, or other related areas is required. A graduate student with a master's degree is preferred. Research experience in solid mechanics, structural mechanics, finite element modeling, composite materials, and basic machine learning models is highly desired.

Qualification requirements:
- Strong interest in advanced materials and structures
- Solid understanding of the basic concepts of mechanics of materials
- Familiar with finite element method and software package Abaqus
- Hands-on experience in programming (fortran, c++, python)
- Self-motivation to perform cutting-edge research in real-world engineering and to publish scholarly papers

To apply for this position, please fill out the PhD pre-application form (https://common.forms.uta.edu/view.php?id=1332433) and enter Xin Liu as "Supervising Professor you plan to work with" on page 1.

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