Postdoctoral Associate Position in Computational Mechanics

Join us in advancing the field of Computational Mechanics and embark on a rewarding postdoctoral journey at the University of Vermont!

A Postdoctoral Associate position is available in the Applied and Computational Mechanics Group in the Department of Civil and Environmental Engineering at the University of Vermont under the guidance of Dr. Lampros Svolos.

Anticipated Start Date: Flexible. The appointment is on a yearly basis, with the possibility of renewal based on performance and funding availability.

Research Topics:
We seek motivated candidates interested in developing novel and efficient numerical methods at the intersection of mechanics and applied mathematics. Example research topics include:
- Multiphysics and multiscale modeling of fracture (e.g., ductile failure, fracking, composites)
- Efficiently solving coupled thermomechanical problems through the use of machine learning

Simulations will be performed on the high-performance computing (HPC) clusters of the Vermont Advanced Computing Center (VACC).

Required Qualifications:
- Ph.D. degree in Engineering or Applied Mathematics (or a closely related field)
- Solid mathematical foundation (e.g., linear algebra, differential equations)
- Programming experience with Python or C++ for scientific applications

Preferred Qualifications:
- Background in Computational Mechanics (e.g., finite element method for structural mechanics) or Applied Mathematics (e.g., numerical methods for differential equations)
- Experience with finite element software packages (advanced level)

What We Offer:
- Competitive salary and benefits package aligned with university guidelines. Postdoctoral Associates & Fellows Overview | Human Resources | The University of Vermont (uvm.edu)
- This position is fully funded.

Application Process:
If you are interested in these research topics, you are encouraged to apply by sending your CV (including contact information of faculty members that can provide recommendation letters) and two recent publications to Dr. Lampros Svolos at Lampros.Svolos@uvm.edu, with the subject line "Postdoc Application: [Your Name]."

We look forward to hearing from you!