PhD Positions in Computational Mechanics at the University of Vermont

Two fully-funded Ph.D. student positions are available in the Computational Mechanics Group in the Department of Civil and Environmental Engineering (CEE) at the University of Vermont under the guidance of Dr. Lampros Svolos. The start dates for these positions are January 2024 for the Spring semester (desired), or August 2024 for the Fall semester.

Research Focus:
We are seeking highly motivated and talented candidates interested in developing efficient computational methods and novel machine-learning techniques at the intersection of engineering mechanics and applied mathematics. The research will have applications to multiphysics problems under extreme conditions (e.g., intense plastic deformation, rapid temperature changes, phase transitions, and dynamic impact loading). Simulations and modeling of material failure will be performed on the high-performance computing (HPC) clusters of the Vermont Advanced Computing Center (VACC).

Required Qualifications:
* B.Sc. degree in Engineering or Applied Mathematics (or a relevant field),
* Strong mathematical foundation (e.g., linear algebra, differential equations),
* Programming experience with Python or C++ for scientific applications.

Preferred Qualifications:
* M.Sc. degree in Engineering or a relevant field,
* Solid background in Computational Mechanics (e.g., Finite Element Method for solid and structural mechanics) or Applied Mathematics (e.g., numerical analysis/methods for partial differential equations).

Application Process:
All applicants for graduate studies at the University of Vermont (UVM) are required to submit their applications online (see instructions here). However, the interested applicants are highly encouraged to initiate contact with Dr. Lampros Svolos before submitting their application.

If you have a keen interest in Computational Mechanics, please send your CV (including contact information of three faculty members that can provide recommendation letters) and recent publications (if any) to Lampros.Svolos@uvm.edu.

For additional information about the Graduate Program in CEE Department at UVM, leading to a Ph.D. degree, please visit our program website.