THE UNIVERSITY OF TENNESSEE
KNOXVILLE

Re: Immediate opening for computational scientist
Duty station: Gaithersburg, MD

The University of Tennessee is seeking a computational scientist for a two year postdoctoral fellowship position focusing on software development that enables users with varying levels of computational expertise to model a variety of soft-matter and biological systems. The candidate will join the Collaborative Computational Project for Small Angle Scattering (CCP-SAS) at UTK, working with a mature international team involving neutron scattering centers and academic institutions, but will be stationed at the NIST Center for Neutron Research in Gaithersburg, Maryland. Good communication skills, familiarity with software development and modern software development tools, C++ and Python are essential. Experience with CUDA is highly preferred. Experience in a computational science, X-ray or neutron scattering and perl programming are a plus.

CCP-SAS (www.ccpsas.org) is a joint UK(EPSRC)/US(NSF) funded project to develop user friendly open source software for high-performance simulation of molecular systems to model scattering data. The goal is to build atomistic and coarse grain modeling and simulation tools that are accessible to a broader community of experimental scientists, particularly soft matter scatterers in order to solve structural questions using constraints of small angle scattering and other experimental data, thus accelerating the discovery process. Tasks will include:

- Developing and writing new algorithms optimized for GPUs and clusters
- Optimizing existing algorithms for GPUs and clusters
- Helping build/maintain a collaborative software development infrastructure
- Providing GUI front ends and documentation aimed at lowering the barrier to entry
- Collaborating on biological and soft matter projects that utilize these tools.
- Helping run workshops for potential developers
- Helping run workshops for users
- Publishing manuscripts describing the work

Please send inquiries and expressions of interest electronically to:
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Application material at: https://ut.taleo.net/careersection/ut_knoxville/jobdetail.ftl?job=160000009L