Organization and Location:
Scientific Computation Research Center
Rensselaer Polytechnic Institute, Troy, NY

Job Title:
Post Doctoral Research Associate

Position Responsibilities:
The Scientific Computation Research Center (www.scorec.rpi.edu) at Rensselaer is seeking a highly qualified post-doctoral research associate to develop and apply automated and adaptive computational solid mechanics methods for multiple application areas with an emphasis on evolving geometry problems such as the modeling of additive manufacturing and material failure.

The successful candidates will develop and implement automated computational methods for evolving domain solid mechanics problems on massively parallel computers. The successful candidates must be able to interact with faculty and students at Rensselaer in order to develop tools for attacking complex applications of interest. The successful candidates will also be required to interact with sponsors.

Qualifications:
* PhD in Mechanical Engineering, Aeronautical/Aerospace Engineering, Applied Mathematics, Computer/Computational Science, or related engineering or science discipline
* Expertise in computational solid mechanics
* Experience in parallel programming and high performance computing
* Good knowledge of FORTRAN, C and/or C++ programming languages and UNIX operating system is required
* Knowledge of modern software engineering tools (such as subversion, redmine, etc.) will be considered favorably
* Knowledge of basic feedback control design and analysis is preferred.

Close Date:
Evaluation of applications will begin immediately and continue until the position is filled.

Contact:
Interested applicants should send a copy of their latest CV with a cover letter or email, names of at least three references, and a summary of recent work. All applications should be submitted electronically (paperless process) via one (all combined) PDF document to:

Prof. Mark Shephard
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