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Professor Edward. K. Blum, Managing Editor  
Journal of Computer and System Sciences  
Mathematics Department, University of Southern California, LA, CA-90089

January 4, 2014

Subject: **Journal of Computer and System Sciences submission**

Dear Sir

I am writing to submit our paper titled “PNBsolver: A Domain-Specific Language for Modeling Parallel Nbody Problems“ for publication in the Journal of Computer and System Sciences.

In this paper, we introduce a two-stage modeling approach that allows domain users to express the problem using domain constructs and reuse the available optimized solutions. This approach has been applied successfully to N-body problems using a domain-specific language called PNBsolver, which allows domain users to specify the computations in an N-body problem without any implementation or platform-specific details. Using the PNBsolver, the domain users are allowed to control the platform and implementation of the generated code. The accuracy and execution time of the generated code can also be fine-tuned based on the parameters provided in PNBsolver. We have included in this paper, some of the common N-body interactions showing how it can be implemented using PNBsolver.

We confirm that this manuscript has not been published elsewhere and is not under consideration by another journal. All authors have approved the manuscript and agree with its submission to Journal of Computer and System Sciences.

Sincerely,

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