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I would like to express my enthusiastic support for the LEAP proposal to investigate advanced forms of parallelism, and to implement them on low-cost, multi-core hardware. One of the components of this proposal, to implement parallel tabled logic programming (TLP) seems especially promising. Over the past decade TLP has been used by a number of research and commercial projects. Parallelizing TLP will support scalability of computationally intensive problems like model-checking and machine learning; combined with mechanisms for concurrency, parallel TLP will enable support of deliberative and reactive agents, and semantic web servers. While these goals are ambitious, the LEAP investigators are uniquely qualified to achieve these goals. Based on their long-term development of YAP, a leading open-source Prolog, they have made innovative contributions to the implementation of TLP and parallelism, contributions which the LEAP project will continue and expand. In addition, their experience with applications, in particular machine learning, will provide problems to drive their designs and to test their implementation. There is every reason to believe that, if funded, the LEAP project will lead not just to interesting experimental results, but to a major next-generation programming and database system.

Sincerely yours,

Terrance Swift

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