Computational Fluid Dynamics Based on Java/JikesRVM/JI Prolog – A Novel Suggestion In The Context of Lattice-Boltzmann Method.

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Idea :

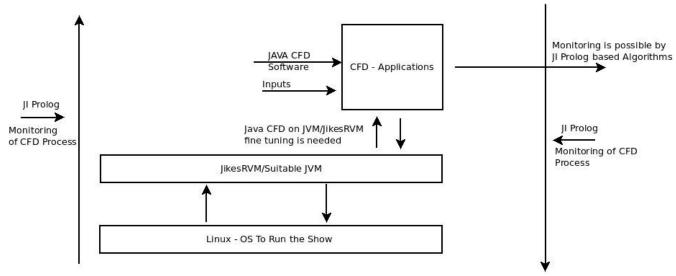
As explained in the TITLE above, we intend to probe CFD computational aspects using JavaCFD/JikesRVM/JI Prolog in a novel way."OOP Lattice-Boltzmann based Fluid Dynamics in Processing".

Inspiration :

"Computational Fluid Dynamics(CFD) is used extensively in engineering to accurately model fluid flow and its associated phenomena". "CFD software written in Java using the Lattice-Boltzmann method. Allows custom-defined, arbitrary geometries in 2D incompressible flow field". The Lattice-Boltzmann Method(LBM) works in a way that is comparable to \rightarrow "Cellular Automata".

[**Source :** http://github.com/SihaoHuang/JavaCFD] / [**Source :** http://www.jiprolog.com/] / [**Source :** http://users.cs.cf.ac.uk/Paul.Rosin/ca.html]

Java CFD-LBM-JikesRVM/JVM Based Informatics Framework :



Approximate Java CFD Based Informatics Framework Using LBM

Figure I – Approximate CFD-LBM Informatics Framework.

Actual implementation may vary to some extent – Readers Please Note.

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THE END.