MOEA Framework & JikesRVM to Probe Computational Fluid Dynamics – An Interesting Insight into the Informatics aspects of CFD Using Genetic Algorithms,Evolutionary Computation & Research Virtual Machine.

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Abstract :

As explained in the TITLE of this short communication,we have tested some inspiring ideas in the context of Computational Fluid Dynamics(CFD) using Java related technologies. Hence,we have demonstrated a simple approach,highly useful in many domains of Science & Technology.

index words : CFD/JikesRVM/MOEA Framework/Genetic Algorithms/Evolutionary Computation

Design & Analysis of Informatics Framework Using – MOEA/JikesRVM/CFD Implementation :

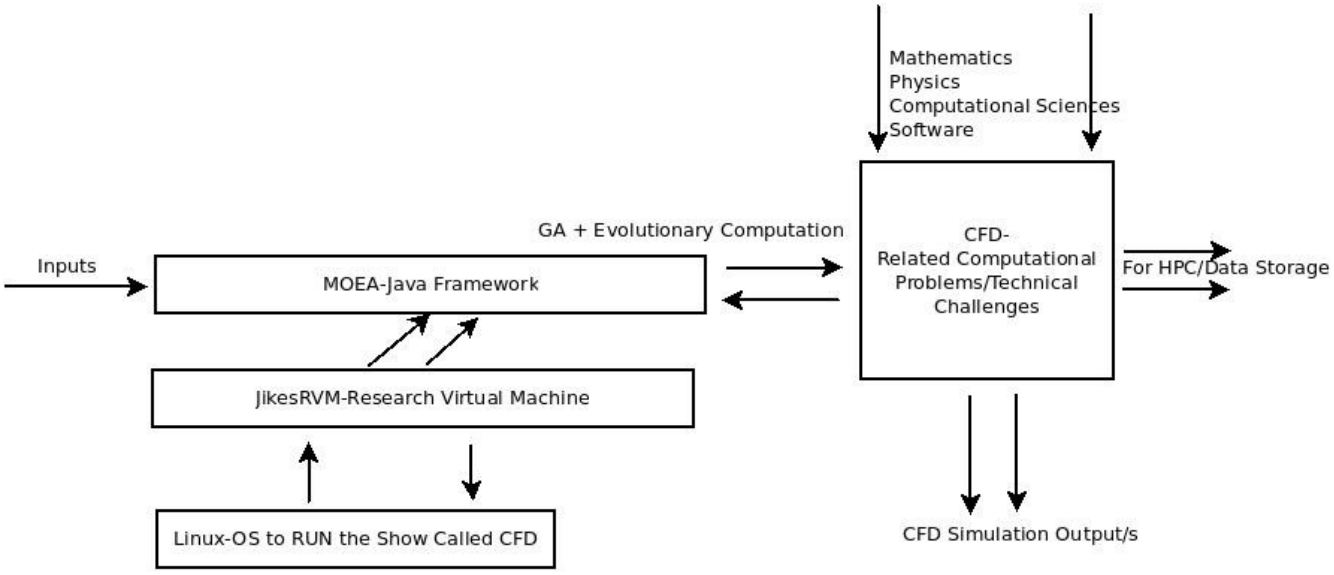

Figure I – Total Overview of our Informatics Framework – Approximate Diagram.

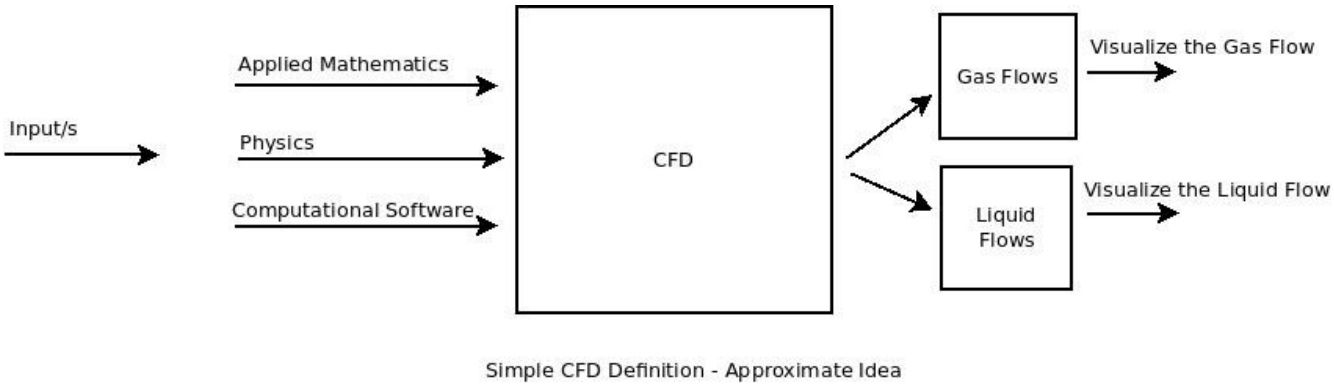

Figure II - Simple CFD Definition.

Additional Information on Mathematics & Software Used :

https://en.wikipedia.org/wiki/Lattice_Boltzmann_methods

http://physics.weber.edu/schroeder/javacourse/LatticeBoltzmann.pdf

http://moeaframework.org/

http://illigal.org/

http://www.jikesrvm.org/

https://github.com/SihaoHuang/JavaCFD

https://ntrs.nasa.gov/archive/nasa/casi.ntrs.nasa.gov/20020043287.pdf

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