Numba-Py + Ising Models Testing using QISKIT + Py-qrng-lib → Exploring Fast MACHINE CODE Generation With LLVM + Zerynth Python IoT Informatics w.r.t Hardware/Software/Firmware.

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[I] Introduction + Inspiration :

“ Numba is an open source JIT compiler that translates a subset of Python and NumPy code into fast machine code.”

“Numba translates Python functions to optimized machine code at runtime using the industry-standard LLVM compiler library. Numba-compiled numerical algorithms in Python can approach the speeds of C or FORTRAN. You don't need to replace the Python interpreter, run a separate compilation step, or even have a C/C++ compiler installed. Just apply one of the Numba decorators to your Python function, and Numba does the rest."

[Source - https://numba.pydata.org/]

“Zerynth is a platform designed to simplify and accelerate the development of IoT applications. Zerynth offers developers, system integrators, and businesses a way to enable IoT for their products, rapidly. Our industry insight, vast experience, and versatile toolset will accompany you from idea to finished product in no time.”

[Source - https://www.zerynth.com/]

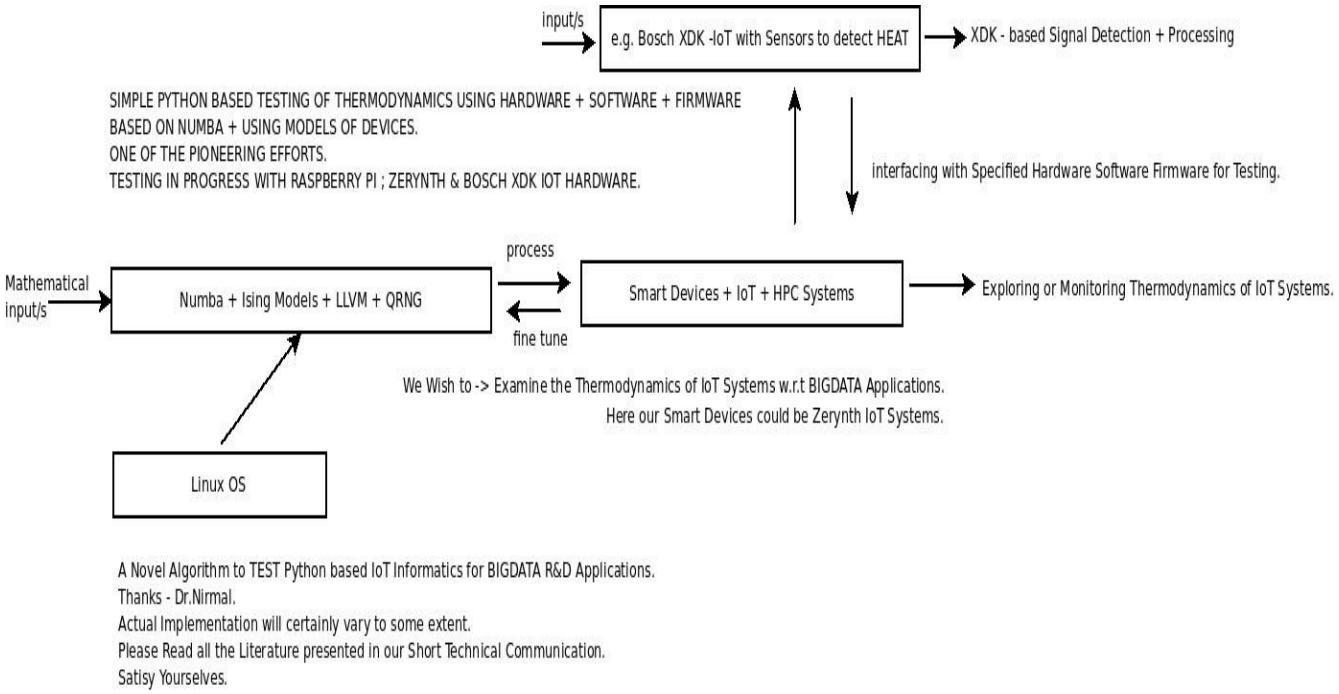
“A tiny 1000 line LLVM-based numeric specializer for scientific Python code.”

[Source - https://github.com/sdiehl/numpile/blob/master/numpile.py]

[Source - https://rajeshrinet.github.io/blog/2014/ising-model/]

[Source - https://github.com/tejdnk-2019-ShortNotes]

[II] R&D Informatics Framework Using Python + Other related Tools :



[Figure I – Simple Algorithm Using Python]

Non-Profit R&D. Sincere Thanks to all WHO made this happen in my LIFE.

[THE END]