Understanding CakeML [ a Functional Programming Language ] w.r.t Testing + Verification of Next Generation IoT + Medical Informatics Systems R&D → Targeting [ AVNET U96 + Zynq MPSoC ] Board With Vedic Mathematics Based UT Sutra for Digital Signal Processing[DSP].

Nirmal – Informatics R&D – USA/UK/Israel/BRICS Group of Nations. Current Member – ante Inst UTD Dallas TX USA. Contact\_info – <a href="mailto:hmfg2014@gmail.com">hmfg2014@gmail.com</a>

## [I] Main Idea + Inspiration + Introduction :

Testing CAKEML + RUST + JSON + VHDL + C language/s w.r.t AVNET U96 + Zynq MPSoC Boards → Next Generation IoT/HPC Platforms.

## [II] R&D Informatics Framework Using CAKEML + Tools to Probe AVNET U96 + Zynq MPSoC Board:

\*\*\* Based on our References – It is very EASY to derive a Novel Embedded Systems Verification Platform with the above mentioned Software Tools.

We are TESTING as of now. More Results later from our side. Meanwhile keep hacking .....

## [III] Useful + Important Reference/s:

- [a] https://github.com/tejdnk-2019-ShortNotes/2021-Nir-Informatics/blob/main/Vedic-Mathematics-Electronics-21.pdf [ UT Sutra ]
- [b] https://github.com/tejdnk-2019-ShortNotes
- [c] https://cakeml.org/
- [d] https://www.hackster.io/341461/avnet-ultra96-v2-face-detection-tutorial-4c72ea
- [e] https://github.com/Avnet/Ultra96-PYNQ/releases
- [f] Also READ: ARM formalized in HOL by Anthony Fox Computer Laboratory, University of Cambridge, UK.
- **[IV] Acknowledgment/s :** Sincere Thanks to all WHO made this happen in my LIFE. Non-Profit R&D. Inspiring Others always is GOOD + USEFUL.
- [V] Conclusion/s With Future Perspectives: The Art of Designing Hardware with Software can be both promising and enjoyable

[THE END]