ETP - E Theorem Prover based Probing of PWM - Pulse Width Modulation Algorithms w.r.t : Raspberry Pi IoT in Python Using Linux Drivers/Zerynth IoT Platform System -> Testing of CUBESATs/Space Instruments or Next Generation Medical Instruments [e.g. MRIs].

[Exploring : Theorem Proving + Deep Learning + IoT + Dr.Racket + Python Programming Languages -> Novel Algorithms Design -> Rigorous Testing of Space + Medicine + Telecoms + HPC Systems R&D -> to Prevent Future Cyber attacks.]

Nirmal - Informatics R&D Collaborator - USA/UK/Israel/Jordan/Germany/Japan/BRICS Group of Nations.
Current Member - ante Inst UTD Dallas TX USA.
Contact_info - hmfg2014@gmail.com

[I] Main Idea + Inspiration + Introduction :

https://www.i-programmer.info/programming/hardware/14883-raspberry-pi-iot-in-c-the-linux-gpio-driver.html

https://www.i-programmer.info/programming/hardware/14934-pi-iot-in-python-using-linux-drivers-pwm.html

https://www.zerynth.com/ -> "The Zerynth IoT Platform is a full set of hardware-software tools designed by IoT experts to enable the digital transformation in a fast, flexible and secure way."

https://www.sciencedirect.com/topics/computer-science/pulse-width-modulation

[II] R&D Informatics Framework + TESTBED to TEST our Novel Algorithms :

We are simulating some cyber attacks using the above mentioned CUBESATs in Space industry & MRI Machines or other Smart Devices used in the medical industry to learn more.

Dr.Racket + Python : -> could be better in learning some aspects of Cyber attacks.

Please generate your own algorithms involving the above mentioned tools + ideas.We are testing @ the time of submission.

[III] Important & Useful References :

https://www.arduino.cc/reference/en/language/functions/analog-io/analogwrite/

https://github.com/tejdnk-2019-ShortNotes/2021-Nir-Informatics/blob/main/AVNET-U96-Ruby-Nir-21.pdf

https://github.com/tejdnk-2019-ShortNotes/tejdnk-Space-Medicine-Informatics-github.io/blob/master/Electronic-Circuits-Grobner%20Bases-Firmware-Nirmal-2020.pdf

https://github.com/tejdnk-2019-ShortNotes/tejdnk-Space-Medicine-Informatics-github.io/blob/master/ES-RUST-ETP-Nir-21.pdf

https://github.com/tejdnk-2019-ShortNotes/tejdnk-Space-Medicine-Informatics-github.io/blob/master/Nirmal-CUBESAT-HOL-Scala-Java-JVM-2020.pdf

https://github.com/tejdnk-2019-ShortNotes/tejdnk-Space-Medicine-Informatics-github.io/blob/master/Nirmal-CUBESAT-GCCS-ControlSoftware-2020.pdf

[IV] Acknowledgment/s :

Sincere Thanks to all who made this happen in my LIFE.Non-Profit R&D.
Let us inspire others ALWAYS.

[V] Conclusion/s with Future Perspectives :

Lot of scope to pursue R&D w.r.t Space + Medicine + Telecoms + IoT/HPC Systems -> Let us HACK & Keep Going.....
Thanks for your time - Dr.Nirmal.

[THE END]