

# **Testing CUBESATs w.r.t AI + Rust + Zircon + Z3-rs + QRNG + its Related Software Tools like MongoDB-rs/Others -> A Short Technical Communication on Space Electronics R&D involving Smart Devices + IoT + HPC Heterogeneous Systems.**

Nirmal - Informatics R&D Collaborator - USA/UK/Israel/BRICS Group of Nations.  
Current Member - ante Inst UTD Dallas TX USA.  
Contact\_info - hmfg2014@gmail.com

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

Reimplement Zircon microkernel in Rust w.r.t CUBESAT Electronics R&D based on the above mentioned Rust + its Related Software Tools.

## **[II] R&D Informatics TESTBED w.r.t CUBESAT Electronics + RUST Programming Language :**

<https://github.com/tejdnk-2019-ShortNotes/tejdnk-Space-Medicine-Informatics-github.io/blob/master/Nirmal-CUBESAT-HOL-Scala-Java-JVM-2020.pdf> -> One of our main R&D Frameworks targeting CUBESATs Using HOL & JVM based Computing Tools.

Do you need more information than this ? Please start working. We are testing some concepts using Rust Programming Language.

Thanks for understanding - Dr.Nirmal.

## **[III] Important & Useful References :**

[a] [https://fuchsia.dev/fuchsia-src/development/kernel/getting\\_started#via\\_zirconboot](https://fuchsia.dev/fuchsia-src/development/kernel/getting_started#via_zirconboot)

[b] <https://github.com/rcore-os/zCore> && [c] <https://github.com/prove-rs/z3.rs>

[d] <https://github.com/prove-rs/z3.rs> && [e] <https://github.com/aldanor/qrng-rust> -> Quasi-Random Sequence Generators in Rust

[f] <https://github.com/tejdnk-2019-ShortNotes/tejdnk-Space-Medicine-Informatics-github.io> -> **See our CUBESAT Notes.**

[g] <https://blog.exodusorbitals.com/2019/06/14/a-programming-language-for-extraterrestrial-applications/>

[h] <https://blog.logrocket.com/machine-learning-in-rust-using-linfa/> && [i] <https://smartcorelib.org/>

[j] <https://dorneworks.com/blog/strengthen-your-sel4-userspace-code-with-rust/>

## **[IV] Acknowledgment/s :**

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

## **[V] Conclusion/s With Future Perspectives :**

Advanced Testing of CUBESATs based on Smart Devices + IoT + HPC Systems. One of the pioneering R&D Efforts.

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