Case Study - Image Recognition – OCaml + C + LLVM+ Owl + AI + Smart Devices + IoT + HPC Heterogeneous Systems R&D.

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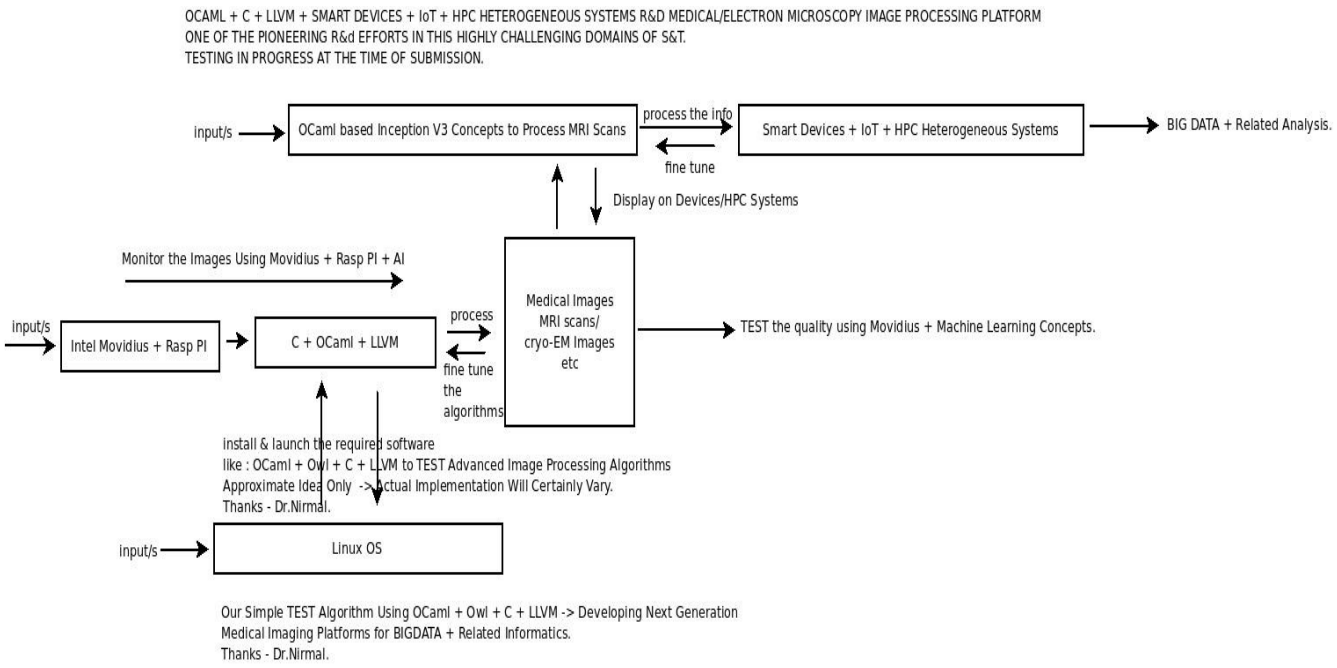
[I] Main Idea + Inspiration + Introduction :

“ InceptionV3 is a widely-used DNN architecture for image classification that can attain significant accuracy with small amount of parameters. It is not invented out of thin air. The development using DNN to perform image recognition is a stream that dates back to more than 20 years ago. During this period, the research in this area is pushed forward again and again in various work. In this chapter, we first introduce how image classification architectures are developed up until Inception. Surveying these related work will help us to understand how Inception architectures are built.”

[https://ocaml.xyz/book/case-image-inception.html]

[II] R&D Informatics Framework Using : OCaml + C + Movidius + Other Tools →



[Figure I – Simple Algorithm I – Advanced Image Processing Framework]

[III] Important & Useful References :

[a] https://hub.packtpub.com/what-makes-functional-programming-a-viable-choice-for-artificial-intelligence-projects/

[b] https://github.com/tejdnk-2019-ShortNotes/tejdnk-Space-Medicine-Informatics-github.io

[c] https://medium.com/@matriXanger/image-recognition-with-owl-a5a6d0caef33

[d] https://movidius.github.io/blog/

[e] https://ocaml.org/manual/intfc.html

[f] https://llvm.org/

[g] https://blog.janestreet.com/using-python-and-ocaml-in-the-same-jupyter-notebook/

[IV] Acknowledgment/s:

Sincere Thanks to all WHO made this happen in my LIFE.

Non-Profit R&D.

Inspire Others Always.

[V] Conclusion/s + Future Perspectives :

OCaml + C + LLVM + Owl + Imaging Mathematics → is quite useful in probing the frontiers of Advanced Medical Imaging/cryo-EM Imaging w.r.t Movidius + Rasp PI + Bosch XDK IoT + HPC + Inception V3 as an **Inspirational Image Processing Architecture.**

[THE END]