

Coq Theorem Prover [CPT] + Q*cert + OCaml + Python + Py-qrng + Tensor Flow [TF-Python/XLA] + QRNG Services/Devices + ImageAI + ImageGPT + Invesalius Medical Imaging R&D Software + Algorithmic Differentiation w.r.t Developing & Testing Robust Next Generation Imaging Algorithms.

Nirmal - Informatics R&D - USA/UK/Japan/Germany/France/Israel/BRICS Group of Nations.
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[I] Main Idea + Inspiration + Introduction :

THE TITLE ITSELF EXPLAINS IT ALL.DO YOU NEED MORE INFO ? KEEP HACKING.KEEP ROCKING THE SHOW.

[a] Coq Theorem Prover - CTP : :-> <https://coq.inria.fr/>

[b] q*cert from IBM : :-> https://researcher.watson.ibm.com/researcher/view_group.php?id=8299
<https://querycert.github.io/>

[c] OCaml : :-> <https://ocaml.org/>

[d] Python : :-> <https://www.python.org/>

[e] Py-qrng : :-> <https://github.com/ozaner/qRNG>

[f] QRNG Services + Devices : :-> <https://qiskit.org/>

[g] Image AI : :-> <http://imageai.org/>

[h] ImageGPT : :-> <https://openai.com/blog/image-gpt/>

[i] Invesalius Medical Imaging Software for R&D : :-> <https://en.wikipedia.org/wiki/InVesalius>

[j] Sensors & Imaging Mathematics : :-> <https://www.uni-siegen.de/zess/forschung/se.html?lang=de>

[k] AD - Algorithmic Differentiation : :-> <https://ocaml.xyz/book/algodiff.html>

[l] Tensor Flow - Python/Machine Learning : :-> <https://www.tensorflow.org/xla>

[m] XLA - Tensor Flow : :-> <https://github.com/tensorflow/tensorflow>

[II] OCaml + Python based Medical Imaging + Intelligent Informatics R&D Framework :

Please derive your own R&D Informatics Framework based on the following reference/s provided.

*For Example : <https://github.com/tejdnk-2019-ShortNotes/2021-Nir-Informatics/blob/main/OCaml-C-llvm-Inceptionv3-Nir-21.pdf>**

[III] Important & Useful References :

[a] <https://github.com/tejdnk-2019-ShortNotes> - a tonne of examples from our side.Please read.

[b] <https://coq.vercel.app/> && [c] <https://www.tensorflow.org/xla> && <https://opensource.google/projects/tensorflow>

[d] <https://machinelearningmastery.com/introduction-python-deep-learning-library-tensorflow/>

[e] <https://www.tensorflow.org/> -> from Google Open Source.

[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 :

One of the pioneering R&D efforts in this highly interesting promising & challenging domains of Medical Imaging.Rigorous Testing in progress @ the TIME of Submission.We have lot of expertise on these domains hence,this simple & short technical communication from us.Hope to see more R&D efforts in this domain of S&T. Further,OCaml + Python : is simply a superb combination in probing novel ideas based on Imaging Mathematics + Quantum Systems + AI/Machine Learning [ML]/Deep Learning [DL] + Theorem proving. Thanks for your encouragement & appreciation.In the near Future -> Functional Programming Languages will make it REAL BIG w.r.t AI + IoT Informatics -> in Probing Next Generation S & T domains like : Space + Medicine + Telecoms + HPC Heterogeneous Systems just to name a few.

[THE END]