

Exploring Coq-of-OCaml & Neural Nets in OCaml using Coq + OCaml Combination to prove the correctness of OCaml programs.

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[I] Main Idea + Inspiration + Introduction :

Refs [a] [b] & [c] - OCaml+ Coq Theorem Prover is an excellent Combination for developing testing & implementing Advanced Software Tools R&D.

[II] R&D Informatics Framework based on Coq + OCaml + Other related Software Tools :

* Just fine tune our Algorithm using our Short Technical Communication shown here :

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

***We hope it is very easy to derive your own R&D Informatics Framework Using OCaml + Coq Theorem Prover w.r.t NN + Image Recognition Tasks.Hence we present this notes.Thanks for reading our notes.**

[III] Important & Useful References :

[a] <https://github.com/liaopeiyan/zeta> && [b] <https://github.com/clarus/coq-of-ocaml>

[c] <https://github.com/tejdnk-2019-ShortNotes/2021-Nir-Informatics>

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

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

[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 :

Good example to prove the correctness of OCaml Programs using Coq Theorem Prover in important domains of Science & Technology R&D.Hope there will be many more ideas based on our Short Technical Communication.Thanks for reading our Short Technical communication.Exploring Functional Neural Networks[FNN] in OCaml & Coq Theorem Prover[CTP] is highly useful. Testing in progress @ the time of submission.

[THE END]