

{ [Dr.Racket + Python + Java] -> Let us Probe : Novel Combination of Ideas Related to Deriving Next Generation Algorithms -> {COVID-19 R&D } }

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[I] Main Idea + Inspiration + Introduction :

Exploring a Combination of DSLs + DL -> Domain Specific Languages with Deep Learning w.r.t COVID-19/Corona Virus.

<https://github.com/tejdnc-2019-ShortNotes/AI-S-T-Applications/blob/main/JVM-Redex-Android-FRC-Nir-21.pdf>

<https://github.com/tejdnc-2019-ShortNotes/AI-S-T-Applications/blob/main/AAM-Nirmal-REDEX-RKT-21.pdf>

<https://github.com/tejdnc-2019-ShortNotes/AI-S-T-Applications/blob/main/Java-FRC-CNN-cryoEM-Nir-21.pdf>

<https://github.com/tejdnc-2019-ShortNotes/AI-S-T-Applications/blob/main/Rkt-Rust-Java-MRIPerF-Nir-21.pdf>

<https://github.com/tejdnc-2019-ShortNotes/AI-S-T-Applications/blob/main/Rkt-JVM-Lang-Nir-21.pdf>

[II] R&D Informatics Framework to Probe MRI Scans Using Dr.Racket :

Let us try to integrate cryo-EM Informatics & MRI Informatics on a Single HPC/Mobile Platform -> is it possible ?

Automata + Abstract Machines + Redex/AAM + Videos/DSL + Deep Learning [DL] -> to Probe [a] MRI Scans & Health Care Informatics Using Dr.Racket & [b] cryo-EM Image Processing with FRC - Fourier Ring Correlation/ImageJ/Java & EMAN2/Python based Bio-informatics -> A Suggestion towards integration of [cryo-EM Informatics + MRI Informatics] on Single Bio-informatics HPC Platform for better Analysis of infections.

Our Novel Ideas to Combine & Come up with an integrated R&D Approach :

Algorithm I - Dr.Racket + Java -> ImageJ based cryo-EM Informatics/FRC + MRI Scans related Informatics -> Predict infections.

Algorithms II - Dr.Racket + Python -> EMAN2 based cryo-EM Informatics + MRI Scans related Informatics -> Predict infections.

[III] Important + Useful References :

[a] <https://github.com/tejdnc-2019-ShortNotes> -> Plenty of Examples for Your information -> Keep Hacking

[b] <https://github.com/tejdnc-2019-ShortNotes/AI-S-T-Applications/blob/main/Rkt-MRI-DL-Nir-21.pdf> * -> Could be useful for Fine Tuning.

[c] ImageJ/Fiji - cryo-EM Informatics/FRC + MRI Perfusion : <https://imagej.net/plugins/mri-perfusion>

[d] EMAN2 - cryo-EM Informatics/FRC : <https://blake.bcm.edu/emanwiki/EMAN2>

[e] Python - MRI Software - Neuro informatics : <https://nipy.org/>

[IV] Acknowledgment/s : Inspire other always.Non-Profit R&D.

[V] Conclusion/s With Future Perspectives : Novel Ideas/Algorithms -> Keep Hacking -> to Probe COVID-19/Corona Virus Informatics.
We are not presenting here our implementation details.
We are TESTING our summarized approach on HPC & Mobile Platforms.

[THE END]