

[Exploring Algorithms with Qt/C/C++/Ruby/mruby/F#/Mongo DB/MongoDb.FSharp w.r.t Medical Imaging Software R&D by Using Shannon Entropy/Machine Learning]

Nirmal – Informatics R&D – ante Inst UTD Dallas TX USA – hmfg2014@gmail.com

[I] Main Idea + Inspiration + Introduction :

“Artificial intelligence and smart applications are steadily becoming more popular. Companies strongly rely on AI systems and machine learning to make faster and more accurate decisions based on their data. This example shows how to create apps that take advantage of both QML and Qt C++.

TensorFlow is Google’s open machine learning framework. Its flexible architecture allows easy deployment of computation across a variety of platforms (CPUs, GPUs, TPUs), and architectures (desktops, clusters of servers, mobile and edge devices). This example integrates TensorFlow with Felgo and provides Image Classification and Object Detection features.

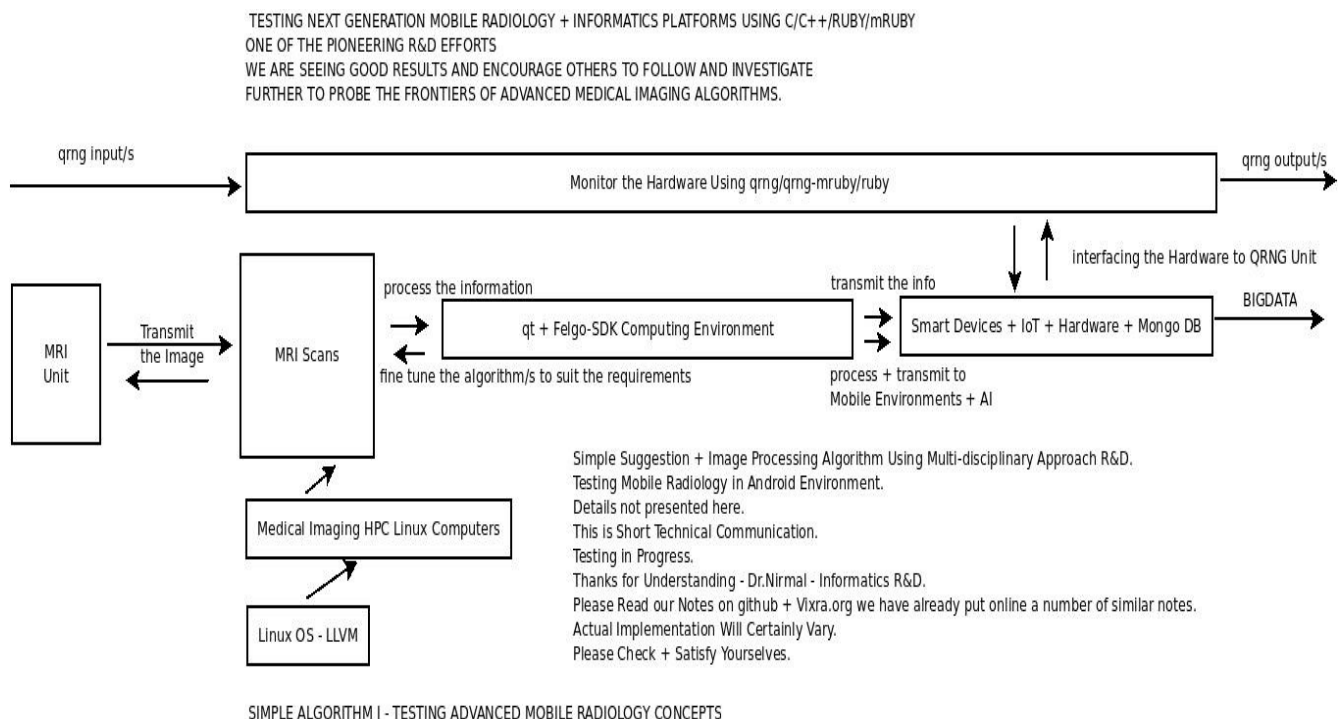
For the full integration guide how to use TensorFlow with Qt and Felgo, see: <https://felgo.com/cross-platform-development/machine-learning-add-image-classification-for-ios-and-android-with-qt-and-tensorflow>. For more information about creating Apps with Felgo, see here: <https://felgo.com/apps/>.”

[Source → <https://github.com/FelgoSDK/TensorFlowQtFelgo>]

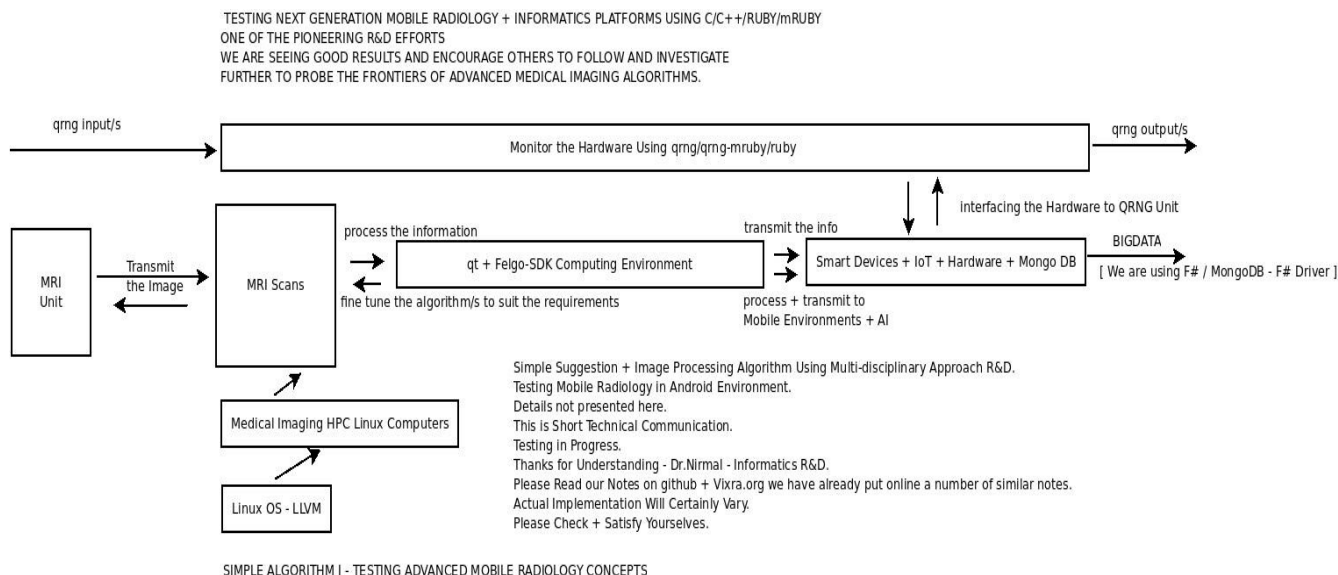
<https://medium.com/swlh/shannon-entropy-in-the-context-of-machine-learning-and-ai-24aee2709e32> - Shannon entropy in the context of machine learning and AI | by Frank Preiswerk | The Startup | Medium.

{ Felgo Cross-Platform SDK & Tooling w.r.t Advanced Mobile Radiology & Informatics Platforms Design Using Intel Movidius + Raspberry PI + SliTaz+ QRNG/Devices & Services + Bosch XDK-IoT + HPC Heterogeneous Systems – A Simple Suggestion to TEST the Interesting Features of Novel Medical Imaging Algorithms.} → Our Main Idea.

[II] R&D Informatics Platforms Implementation Using Software + Hardware :



[Figure I – Algorithm I – Advanced Mobile Radiology Testing Environment involving Shannon Entropy Related Concepts]



[Figure II – Algorithm II – Advanced Mobile Radiology Testing Environment involving Shannon Entropy Related Concepts Using F# -Modified Algorithm I]

[III] Important + Useful References :

[a] <https://github.com/tejdnk-2019-ShortNotes> – Plenty of Examples – Please Read.

[b] <https://github.com/fsprojects>

[c] <https://channel9.msdn.com/Shows/On-NET/Writing-tests-with-F>

[d] https://dotnet.microsoft.com/languages/fsharp?WT.mc_id=ondotnet-c9-cxa

[IV] Acknowledgment/s : Non-Profit R&D. Inspire Others Always. Thanks to all.

[V] Conclusion/s With Future Perspectives : One of the pioneering R&D Efforts w.r.t Mobile Radiology & Informatics Using C/C++/Ruby/mruby/F# with a multi-disciplinary background. We are certain this R&D Short Technical Notes would trigger lot of interesting ideas to probe the frontiers of Advanced Medical Imaging.

[THE END]