Weekly Meeting with Dr. Hannah

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Quantitative Imaging Research and

Artificial Intelligence Lab (QIRAIL)

Meeting Note

Necessity is the Mother of Invention

"Over the last 6 years, QIRAIL has executed 10–15+ technical projects, but much of the source code, datasets, and documentation are scattered or lost."

Problem:

- Hard to locate past project files.
- No central archive for reusable code or documentation tends to "Every time we start a new project, we re-invent the wheel"
- New members feel overwhelmed due to lack of structure.

Why this matters:

- Showcasing lab achievements becomes tedious.
- Lost data/code equals lost time and effort.

Core Idea:

Build a centralized, long-term knowledge base for QIRAIL!!!

Meeting Note

Why This Week's GitHub Work Matters

Core Idea: Build a centralized, long-term knowledge base for QIRAIL

Goals:

- Organize past and current work into meaningful repositories.
- Support reproducibility, collaboration, and onboarding.
- Avoid data/code loss due to device failure or disorganization.

Repositories Created This Week

1. QIRAIL-Knowledge-Transfer

Purpose: Document key tools, techniques, tutorials.

2. QIRAIL-Orthanc_Data_Backup

Purpose: Backup and structure scripts related to Orthanc & metadata extraction.

3. CHAVI

Purpose: Backup any scripts and procedures related to CHAVI project.

4. Head_and_Neck_Prospective_Study

Purpose: All model-building work on prospective study is logged here.

5. **NVIDIA-Academic-Grant-Proposal**

Purpose: Proposal writing progress and related documentation.

6. HNC Risk Prediction Dashboard

Purpose: Source code for dashboard, both frontend (React) and backend (FastAPI).

Meeting Note

Long-Term Vision

Helps With:

- Faster onboarding of new members
- Easier internal collaboration
- Rapid demonstration for presentations or grant submissions
- Protection from local hardware failures

Next Steps:

- Continue uploading validated code from old projects
- Link project README files with diagrams for better understanding
- Encourage team members to contribute and standardize formats

"This is not just archiving code – it's building the research memory of our lab."

- Total of 6 GitHub repositories created and organized
- Lays foundation for reproducibility, scaling, and continuity
- Happy to maintain and keep refining this system as we grow