HRRT_U 1.0 project

Requirements

General requirements

- 1. The installation of the provided distribution should not modify or replace any file of the original distribution.
- 2. The distribution should include binaries and source code except for the proprietary scatter correction code which will be provided as library object.
- 3. The user should be able to use either the original or the modified software.
- 4. The installation of the firmware (download to Coincidence Controller, Detector Head Interface and Front Panel) should be optional and the modified software should be compatible with the original firmware.
- 5. The user should be able to reverse the modified firmware installation to restore the original firmware and clear instructions should be provided to perform this operation.
- 6. All distributions should be archived and each distribution should contain a description of changes and complete list of modified and new files.

HRRT_U 1.0 requirements

In addition to features provided in the official Siemens HRRT1.0 Beta release, HRRT_U 1.0 should include:

- 1. Inki's OSEM3D with PSF (hrrt_osem3d.exe)
- 2. Component based normalization (norm process.exe)
- 3. Faster scatter correction (e7 sino u.exe)
- 4. Inki's fast random smoothing (gen_delays.exe)
- 5. Reconstruction User Interface for using 1-4 (ReconGUI u.exe)
- 6. New Siemens daily QC (DailyQC u.exe)
- 7. Roman's scatter parameter adjustment tool (calcringroiratio.exe)
- 8. Turku's Interfile to ECAT conversion tool (if2e7.exe)

Hardware and Operating System requirements

The distribution will contain binaries for 64bit and 32bit Microsoft Windows Operating system. Most source code modules may be compatible with Linux OS and a makefile may be provided to build them but no binaries will be provided for Linux.