Inventors:
Zulkarnay Zakaria
Noor Hidayah Jaafar

Contact Details :

SCHOOL OF MECHATRONIC ENGINEERING,
KOMPLEKS PUSAT PENGAJIAN JEJAWI 2,
UNIVERSITI MALAYSIA PERLIS,
02600 JEJAWI, PERLIS, MALAYSIA.
TEL : +604 9798154 | FAX : +604 9798178
Email : zulkarnay@unimap.edu.my

- Interactive
- Comprehensive
- Simple

COMPUTED TOMOGRAPHY SIMULATION SOFTWARE

PRODUCT OVERVIEW
This product consist of MATLAB GUI which applies the concept of Filtered Back Projection technique of a Computed Tomography System based on the real CT scanner machine data generation and data processing. This system has been proved capable in filtering the noise and artifacts.

PRODUCT DESCRIPTION
Involve line integral /Radon transform applications, sinogram generation and image reconstruction. The result of the generated image is display through Graphical User Interface (GUI). Both algorithm and GUI are developed using MATLAB software.

TARGET USER
Universities & colleges that offer CT and related coursers or radiologist training departments in the goverment hospitals.

Phantom → Sinogram → Image

Line integral/ Radon transform

Image reconstruction

$\theta = 0$