Measurements Model for SPECT Systems

Fields
Signal processing
Medical imaging

Introduction
SPECT (single photon emission computerized tomography) is a medical Imaging system, in which radioactive substance is injected to the patient, and a gamma camera is used to image its distribution in the body. In order to get a three dimensional image a computerized tomography algorithm is used on two dimensional projections of the image. This algorithm uses a measurements matrix which models the projections on the camera plains.

Project description
The purpose of the project is to understand the projections model and create the measurements matrix.

Requirements
Random signals
Good Matlab programming skills

Duration
One semester

Supervisor
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