

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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